



Steven L. Beshear
Governor

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

Robert D. Vance
Secretary

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

February 27, 2008

Randy L. Tackett
Sidney Coal Company, Inc.
PO Box 299
Sidney, KY 41564

Re: KPDES Application Complete
KPDES No.: KY0107140
Sidney Coal Company Inc. - Bevins Branch Surface Mine
AI ID: 85262
Activity ID: APE20070001
Pike County, Kentucky

Dear Mr. Tackett,

Your revised Kentucky Pollutant Discharge Elimination System (KPDES) permit application for the above-referenced facility was received by the Division of Water on February 26, 2008. A completeness review of your permit application has been conducted. Please be aware that you may be asked to provide additional information to clarify, modify, or supplement your application material. In accordance with 401 KAR 5:075, Section 1(7) you are being provided written notification that your application has been deemed complete as of the date of this letter.

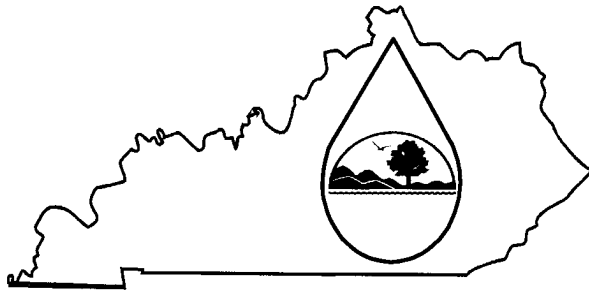
If you have any questions concerning this matter, please call me at (502) 564-8158, extension 652.

Sincerely,

Allen Ingram II
Environmental Engineer Assistant I
KPDES Branch
Division of Water

ALI
Enclosures
c: Division of Water Files

KPDES FORM C



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Bevins Branch Surface Mine	County: Pike							
I. OUTFALL LOCATION	AGENCY USE	0	1	0	7	1	4	0

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
D1	37	40	05	82	22	32	Big Creek
D2	37	40	02	82	22	34	Big Creek
D3	37	39	55	82	22	31	Big Creek
D4	37	39	53	82	22	24	Bevins Branch
D5	37	39	53	82	22	16	Bevins Branch
D5A	37	39	52	82	22	04	Bevins Branch
D5B	37	39	41	82	22	04	Bevins Branch
D6	37	39	46	82	22	12	Bevins Branch
D7	37	39	46	82	22	20	Bevins Branch
D8	37	39	46	82	22	20	Bevins Branch
Pond 1A	37	39	47	82	22	07	Bevins Branch

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
D1	Surface runoff	27.91 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D2	Surface runoff	13.32 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D3	Surface runoff	7.45 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D4	Surface runoff	18.11 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5	Surface runoff	33.60 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5A	Surface runoff	75.92 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5B	Surface runoff	50.06 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D6	Surface runoff	14.84 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D7	Surface runoff	13.90 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D8	Surface runoff	7.01 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
Pond 1A	Surface runoff	411.09 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

- C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐

Yes (Complete the following table.)

☒

No (Go to Section III.)

OUTFALL NUMBER (list)	OPERATIONS CONTRIBUTING FLOW (list)	FREQUENCY		FLOW				
		Days Per Week (specify average)	Months Per Year (specify average)	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ Yes (Complete Item III-B) List effluent guideline category:

☒ No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☐ Yes (Complete Item III-C)

☒ No (Go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐ Yes (Complete the following table)

☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE
NONE			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

- A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐

Yes (List all such pollutants below)

☒

No (Go to Item VI-B)

- B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐

Yes (Complete Item VI-C)

☒

No (Go to Item VII)

- C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (Identify the test(s) and describe their purposes below)

☒ No (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)

☐ No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)
Appalachian States Analytical, LLC	P.O. Box 520 Shelbiana, KY 41562	(606) 437-5616	Total Suspended Solids Antimony, Total Chromium, Total Nickel, Total Zinc, Total Sulfate pH Arsenic, , Total Copper, Total Selenium, Total Cyanide, Total Iron, Total Beryllium, Total Lead, Total Silver, Total Phenols, Total Hardness Manganese, Total Cadmium, Total Mercury, Total Thallium, Total

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
SIGNATURE	DATE

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)										OUTFALL NO.		
Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.												
1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No of Analyses
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)	22						1	mg/l				
e. Ammonia (as N)												
f. Flow (in units of MGD)		VALUE No Flow		VALUE		VALUE	1	MGD			VALUE	
g. Temperature (winter)		VALUE		VALUE		VALUE		°c			VALUE	
h. Temperature (summer)		VALUE		VALUE		VALUE		°c			VALUE	
i. pH	MINIMUM 7.02	MAXIMUM 7.02	MINIMUM	MAXIMUM				STANDARD UNITS				

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		6. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Bromide (24959-67-9)		X												
b. Bromine Total Residual		X												
c. Chloride		X												
d. Chlorine, Total Residual		X												
e. Color		X												
f. Fecal Coliform		X												
g. Fluoride (16984-48-8)		X												
h. Hardness (as CaCO ₃)	X		414.77						1	mg/l				
i. Nitrate - Nitrite (as N)		X												
j. Nitrogen, Total Organic (as N)		X												
k. Oil and Grease		X												
l. Phosphorous (as P), Total 7723-14-0		X												
m.														
Radioactivity														
(1) Alpha, Total		X												
(2) Beta, Total		X												
(3) Radium Total		X												
(4) Radium, 226, Total		X												

Part B - Continued												
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)	
	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day		c. Long-Term Avg.		d. No. of Analyses	a.	b.	b.
			Maximum Daily Value (1)	Concentration (2)	Value (if available) (1)	Concentration (2)	Value (if available) (1)	Concentration (2)				
n. Sulfate (as SO ₄) (14808-79-8)	X		399						1	mg/l		
o. Sulfide (as S)		X										
p. Sulfite (as SO ₃) (14286-46-3)		X										
q. Surfactants		X										
r. Aluminum, Total (7429-90)		X										
s. Barium, Total (7440-39-3)		X										
t. Boron, Total (7440-42-8)		X										
u. Cobalt, Total (7440-48-4)		X										
v. Iron, Total (7439-89-6)	X		0.09						1	mg/l		
w. Magnesium Total (7439-96-4)		X										
x. Molybdenum Total (7439-98-7)		X										
y. Manganese, Total (7439-96-6)	X		<0.01						1	mg/l		
z. Tin, Total (7440-31-5)		X										
aa. Titanium, Total (7440-32-6)		X										

Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the **Testing Required** column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark "X" in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark "X" in the **Believed Absent** column for each pollutant you believe to be absent. If you mark either the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)				
	a. Testing Required	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No. of Analyses	
				Maximum Daily Value (1)	Concentration Mass	(2)	Mass	(1)	Concentration Mass				(2)	Mass		Long-Term Avg Value (1)
METALS, CYANIDE AND TOTAL PHENOLS																
1M. Antimony Total (7440-36-0)	X				<0.002						1	mg/l				
2M. Arsenic, Total (7440-38-2)	X				<0.001						1	mg/l				
3M. Beryllium Total (7440-41-7)	X				<0.005						1	mg/l				
4M. Cadmium Total (7440-43-9)	X				<0.005						1	mg/l				
5M. Chromium Total (7440-43-9)	X				<0.02						1	mg/l				
6M. Copper Total (7550-50-8)	X				<0.01						1	mg/l				
7M. Lead Total (7439-92-1)	X				<0.05						1	mg/l				
8M. Mercury Total (7439-97-6)	X				<0.0002						1	mg/l				
9M. Nickel, Total (7440-02-0)	X				0.009						1	mg/l				
10M. Selenium, Total (7782-49-2)	X				0.009						1	mg/l				
11M. Silver, Total (7440-28-0)	X				<0.01						1	mg/l				

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)				
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
METALS, CYANIDE AND TOTAL PHENOLS (Continued)																
12M. Thallium, Total (7440-28-0)	X			0.1						1	mg/l					
13M. Zinc, Total (7440-66-6)	X			<0.005						1	mg/l					
14M. Cyanide, Total (57-12-5)	X			<0.01						1	mg/l					
15M. Phenols, Total	X			<0.04						1	mg/l					
DIOXIN																
2,3,7,8 Tetra- chlorodibenzo, P, Dioxin (1784-01-6)			X	DESCRIBE RESULTS:												
GC/MS FRACTION – VOLATILE COMPOUNDS																
1V. Acrolein (107-02-8)			X													
2V. Acrylonitrile (107-13-1)			X													
3V. Benzene (71-43-2)			X													
5V. Bromoform (75-25-2)			X													
6V. Carbon Tetrachloride (56-23-5)			X													
7V. Chloro- benzene (108-90-7)			X													
8V. Chlorodibro- momethane (124-48-1)			X													

Part C – Continued													
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)	
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				
9V. Chloroethane (74-00-3)			X										
10V. 2-Chloro-ethylvinyl Ether (110-75-8)			X										
11V. Chloroform (67-66-3)			X										
12V. Dichloro-bromomethane (75-71-8)			X										
14V. 1,1-Dichloroethane (75-34-3)			X										
15V. 1,2-Dichloroethane (107-06-2)			X										
16V. 1,1-Dichloroethylene (75-35-4)			X										
17V. 1,2-Dichloropropane (78-87-5)			X										
18V. 1,3-Dichloropropylene (452-75-6)			X										
19V. Ethylbenzene (100-41-4)			X										
20V. Methyl Bromide (74-83-9)			X										

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day		c. Long-Term Avg.		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No. of Analyses	
				Maximum Daily Value (1)	Mass (2)	Value (if available) (1)	Mass (2)	Value (if available) (1)	Mass (2)				Long-Term Avg. Value (1)	Mass (2)		
21V. Methyl Chloride (74-87-3)			X													
22V. Methylene Chloride (75-00-2)			X													
23V. 1,1,2,2- Tetrachloro- ethane (79-34-5)			X													
24V. Tetrachloro- ethylene (127-18-4)			X													
25V. Toluene (108-88-3)			X													
26V. 1,2-Trans- Dichloro- ethylene (156-60-5)			X													
27V. 1,1,1-Tr- chloroethane (71-55-6)			X													
28V. 1,1,2-Tr- chloroethane (79-00-5)			X													
29V. Trichloro- ethylene (79-01-6)			X													
30V. Vinyl Chloride (75-01-4)			X													

Part C – Continued																
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)				
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day		c. Long-Term Avg.		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass		
																(1)
GC/MS FRACTION – ACID COMPOUNDS																
1A. 2-Chloro-phenol (95-57-8)			X													
2A. 2,4-Dichloro-Orophenol (120-83-2)			X													
3A. 2,4-Dimeth-yphenol (105-67-9)			X													
4A. 4,6-Dinitro-o-cresol (534-52-1)			X													
5A. 2,4-Dinitro-phenol (51-28-5)			X													
6A. 2-Nitro-phenol (88-75-5)			X													
7A. 4-Nitro-phenol (100-02-7)			X													
8A. P-chloro-m-cresol (59-50-7)			X													
9A. Pentachloro-phenol (87-88-5)			X													
10A. Phenol (108-05-2)			X													
11A. 2,4,6-Tri-chlorophenol (88-06-2)			X													
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS																
1B. Acena-phtlene (83-32-9)			X													

Part C – Continued

1. POLLUTANT And CAS NO. (if available)		2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				Concentration (1)	Mass (2)	Concentration (1)	Mass (2)	Concentration (1)	Mass (2)				Concentration (1)	Mass (2)	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
2B. Acena-phylene (208-96-8)			X												
3B. Anthracene (120-12-7)			X												
4B. Benzidine (92-87-5)			X												
5B. Benzo(a)-anthracene (56-55-3)			X												
6B. Benzo(a)-pyrene (50-32-8)			X												
7B. 3,4-Benzo-fluoranthene (205-99-2)			X												
8B. Benzo(ghi)perylene (191-24-2)			X												
9B. Benzo(k)-fluoranthene (207-08-9)			X												
10B. Bis(2-chlor-oethoxy)-methane (111-91-1)			X												
11B. Bis (2-chlor-oisopropyl)-Ether			X												
12B. Bis (2-ethyl-hexyl)-phthalate (117-81-7)			X												

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
13B. 4-Bromo-phenyl Phenyl ether (101-55-3)			X													
14B. Butyl- benzyl phthalate (85-68-7)			X													
15B. 2-Chloro- naphthalene (7005-72-3)			X													
16B. 4-Chloro- phenyl phenyl ether (7005-72-3)			X													
17B. Chrysene (218-01-9)			X													
18B. Dibenzo- (a,h) Anthracene (53-70-3)			X													
19B. 1,2- Dichloro- benzene (95-50-1)			X													
20B. 1,3- Dichloro- Benzene (541-73-1)			X													
21B. 1,4- Dichloro- benzene (106-46-7)			X													
22B. 3,3- Dichloro- benzidine (91-94-1)			X													
23B. Diethyl Phthalate (84-66-2)			X													

Part C – Continued																
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
24B. Dimethyl Phthalate (131-11-3)			X													
25B. Di-N- butyl Phthalate (84-74-2)			X													
26B. 2,4-Dinitro- toluene (121-14-2)			X													
27B. 2,6-Dinitro- toluene (606-20-2)			X													
28B. Di-n-octyl Phthalate (117-84-0)			X													
29B. 1,2- diphenyl- hydrazine (as azonbenzene) (122-66-7)			X													
30B. Fluoranthene (208-44-0)			X													
31B. Fluorene (86-73-7)			X													
32B. Hexachloro- benzene (118-71-1)			X													
33B. Hexachloro- butadiene (87-68-3)			X													
34B. Hexachloro- cyclopenta- diene (77-47-4)			X													

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day		c. Long-Term Avg.		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No. of Analyses		
				Maximum Daily Value (1)	Value (2)	Value (1)	Value (2)	Value (1)	Value (2)				Long-Term Avg Value (1)	(2)			
																Concentration	Mass
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																	
35B. Hexachloroethane (67-72-1)			X														
36B. Indeno-(1,2,3-oc)-Pyrene (193-39-5)			X														
37B. Isophorone (78-59-1)			X														
38B. Naphthalene (91-20-3)			X														
39B. Nitrobenzene (98-95-3)			X														
40B. N-Nitrosodimethylamine (62-75-9)			X														
41B. N-nitrosodi-n-propylamine (621-64-7)			X														
42B. N-nitrosodiphenylamine (86-30-6)			X														
43B. Phenanthrene (85-01-8)			X														
44B. Pyrene (129-00-0)			X														
45B. 1,2,4 Tri-chlorobenzene (120-82-1)			X														

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day		c. Long-Term Avg.		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No. of Analyses	
				Maximum Daily Value (1)	Concentration	Value (if available) (1)	Concentration	Value (if available) (1)	Concentration				Long-Term Avg. Value (1)	Concentration		
																(2)
GC/MS FRACTION – PESTICIDES																
1P. Aldrin (309-00-2)			X													
2P. α-BHC (319-84-6)			X													
3P. β-BHC (58-89-9)			X													
4P. gamma-BHC (58-89-9)			X													
5P. δ-BHC (319-86-8)			X													
6P. Chlordane (57-74-9)			X													
7P. 4,4'-DDT (50-29-3)			X													
8P. 4,4'-DDE (72-55-9)			X													
9P. 4,4'-DDD (72-54-8)			X													
10P. Dieldrin (60-57-1)			X													
11P. α- Endosulfan (115-29-7)			X													
12P. β- Endosulfan (115-29-7)			X													
13P. Endosulfan Sulfate (1031-07-8)			X													
14P. Endrin (72-20-8)			X													

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				Concentration (1)	Mass (2)	Concentration (1)	Mass (2)	Concentration (1)	Mass (2)				Concentration (1)	Mass (2)		
GC/MS FRACTION – PESTICIDES																
15P. Endrin Aldehyde (7421-93-4)			X													
16P. Heptachlor (76-44-8)			X													
17P. Heptachlor Epoxide (1024-57-3)			X													
18P. PCB-1242 (53469-21-9)			X													
19P. PCB-1254 (11097-69-1)			X													
20P. PCB-1221 (11104-28-2)			X													
21P. PCB-1232 (11141-16-5)			X													
22P. PCB-1248 (12672-29-6)			X													
23P. PCB-1260 (11096-82-5)			X													
24P. PCB-1016 (12674-11-2)			X													
25P. Toxaphene (8001-35-2)			X													



ERNE FLETCHER
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

DIVISION OF WATER

14 REILLY ROAD

FRANKFORT, KENTUCKY 40601-1190

www.kentucky.gov

TERESA J. HILL
SECRETARY

October 19, 2007

Randy L. Tackett
Sidney Coal company, Inc.
P.O. Box 299
Sidney, KY 41564

Re: KPDES Application Notice of Deficiency
KPDES No.: KY0107140
Sidney Coal Company Inc. - Bevins Branch Surface
Mine
AI ID: 85262
Activity ID: APE20070001
Pike County, Kentucky

Dear Mr. Tackett,

Your Kentucky Pollutant Discharge Elimination System (KPDES) permit application for the above-referenced facility was received by the Division of Water on September 10, 2007. A completeness review of your permit application has been conducted and the application has been determined to be incomplete. Please complete the deficiencies listed below and return to me at the following address within thirty (30) days of the date of this letter.

**Division of Water, KPDES Branch
ATTN: Ms. Sara Beard
14 Reilly Road, Frankfort Office Park
Frankfort, Kentucky 40601**

1. Complete Section V of Form C (highlighted in yellow) on the enclosed sheet and return. If ponds for this site are not yet constructed and retaining water for sampling, please locate a site with discharges representative of the discharges expected from this site.

Failure to return the requested information within thirty (30) days may result in the Cabinet returning your application to you and retaining filing fees that have been paid, as per 401 KAR 5:300, Section 2(2). If you have any questions concerning this request, please call me at (502) 564-3410, extension 590.

Sincerely,

Sara Beard
Environmental Engineer Assistant III
KPDES Branch
Division of Water

SJB
Enclosures

c: Misty D. Hamilton – Summit Engineering, Inc.
131 Summit Drive
Pikeville, KY 41501
Division of Water Files

September 2007

Form 1, Form C, and Form HQAA
KPDES INDIVIDUAL PERMIT COVERAGE APPLICATION

Sidney Coal Company, Inc.
KDMRE PERMIT No. 898-0798
Bevins Branch Surface Mine

Prepared for:

Sidney Coal Company, Inc.
P.O. Box 299
Sidney, KY 41564

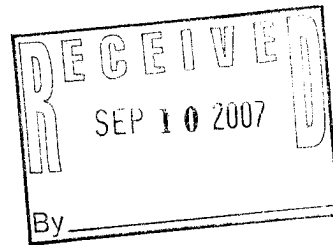
Prepared by:

Summit Engineering, Inc.
131 Summit Drive
Pikeville, KY 41501
Telephone: (606) 432-1447



SUMMIT ENGINEERING, INC.

September 6, 2007



Erin Wright
Inventory & Data Management Section
KPDES Branch
Division of Water
14 Reilly Road
Frankfort, Kentucky 40601

RE: Sidney Coal Company, Inc.
KDMRE Permit No. 898-0798
Bevins Branch Surface Mine

Dear Erin:

Please find enclosed copy of a completed Form 1, Form C, and Form HQAA for the above-referenced surface mine to be located in Pike County. Sidney Coal Company seeks approval for Individual Permit coverage under KPDES, for their proposed mining activities.

If you have any questions, or require additional information, please call me at (606) 432-1447 ext. 309 or e-mail mhamilton@summit-engr.com.

Regards,

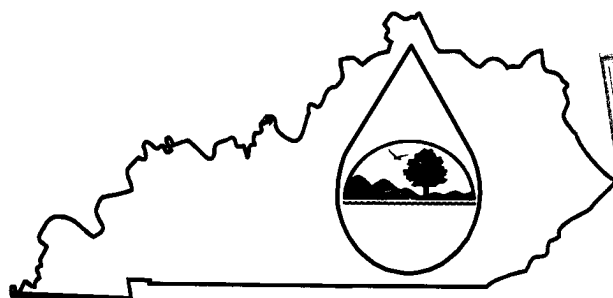
Misty D. Hamilton
Environmental Project Manager

c: file

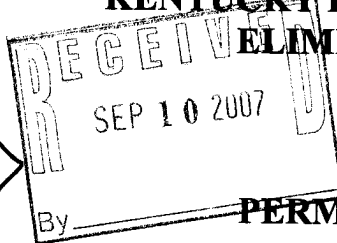
enclosure

KPDES FORM 1

AL 85262



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM



PERMIT APPLICATION

This is an application to: (check one)

- ☒ Apply for a new permit.
☐ Apply for reissuance of expiring permit.
☐ Apply for a construction permit.
☐ Modify an existing permit.

Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:

Form A, Form B, Form C, Form F, or Short Form C

For additional information contact:

KPDES Branch (502) 564-3410

\$240.00

I. FACILITY LOCATION AND CONTACT INFORMATION		AGENCY USE	0	1	0	7	1	4	0
A. Name of business, municipality, company, etc. requesting permit Sidney Coal Company, Inc.									
B. Facility Name and Location					C. Facility Owner/Mailing Address				
Facility Location Name: Bevins Branch Surface Mine					Owner Name: Sidney Coal Company, Inc.				
Facility Location Address (i.e. street, road, etc.): Near the junction of Rt. 468 and Rockhouse Fork Road					Mailing Street: P. O. Box 299				
Facility Location City, State, Zip Code: Sidney, KY 41564					Mailing City, State, Zip Code: Sidney, KY 41564				
					Telephone Number: (606) 353-7201				

II. FACILITY DESCRIPTION

A. Provide a brief description of activities, products, etc: **Surface coal mining**

B. Standard Industrial Classification (SIC) Code and Description

Principal SIC Code & Description: **1221 - Bituminous Coal & Lignite Mining**

Other SIC Codes:

III. FACILITY LOCATION

A. Attach a U.S. Geological Survey 7 1/2 minute quadrangle map for the site. (See instructions)

B. County where facility is located:

Pike

City where facility is located (if applicable):

C. Body of water receiving discharge:

Big Creek

D. Facility Site Latitude (degrees, minutes, seconds):

37° 39' 47" N

Facility Site Longitude (degrees, minutes, seconds):

82° 22' 05" W

E. Method used to obtain latitude & longitude (see instructions):

Topographic map coordinates

F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):

IV. OWNER/OPERATOR INFORMATION**A. Type of Ownership:**

☐ Publicly Owned ☒ Privately Owned ☐ State Owned ☐ Both Public and Private Owned ☐ Federally owned

B. Operator Contact Information (See instructions)

Name of Treatment Plant Operator:

Sidney Coal Company, Inc.

Telephone Number:

(606) 353-7201

Operator Mailing Address (Street):

P. O. Box 299

Operator Mailing Address (City, State, Zip Code):

Sidney, KY 41564

Is the operator also the owner?

Yes ☒ No ☐

Is the operator certified? If yes, list certification class and number below.

Yes ☐ No ☒

Certification Class:

Certification Number:

V. EXISTING ENVIRONMENTAL PERMITS

Current NPDES Number:

KY0107140

Issue Date of Current Permit:

Expiration Date of Current Permit:

Number of Times Permit Reissued:

Date of Original Permit Issuance:

Sludge Disposal Permit Number:

Kentucky DOW Operational Permit #:

Kentucky DSMRE Permit Number(s):

898-0798

C. Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source		
Solid or Special Waste		
Hazardous Waste - Registration or Permit		

VI. DISCHARGE MONITORING REPORTS (DMRs)

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). The information in this section serves to specifically identify the department, office or individual you designate as responsible for submitting DMR forms to the Division of Water.

A. Name of department, office or official submitting DMRs:	Randy Tackett, Agent
B. Address where DMR forms are to be sent. (Complete only if address is different from mailing address in Section I.)	
DMR Mailing Name:	
DMR Mailing Street:	
DMR Mailing City, State, Zip Code:	
DMR Official Telephone Number:	

VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. Descriptions of the base fee amounts are given in the "General Instructions."

Facility Fee Category:

Surface Mining Operation

Filing Fee Enclosed:

\$240.00

VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):

Randy L. Tackett, Agent

TELEPHONE NUMBER (area code and number):

606-353-5500

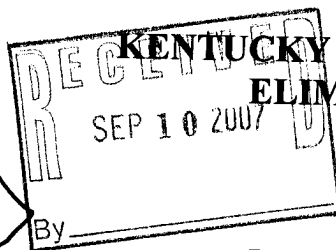
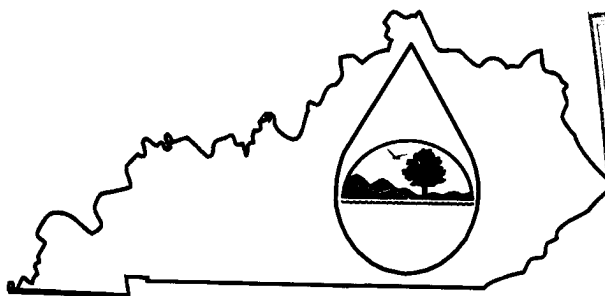
SIGNATURE

Randy L. Tackett

DATE:

8-22-07

KPDES FORM C



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Bevins Branch Surface Mine	County: Pike							
I. OUTFALL LOCATION	AGENCY USE	0	1	0	7	1	4	0

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
D1	37	40	05	82	22	32	Big Creek
D2	37	40	02	82	22	34	Big Creek
D3	37	39	55	82	22	31	Big Creek
D4	37	39	53	82	22	24	Bevins Branch
D5	37	39	53	82	22	16	Bevins Branch
D5A	37	39	52	82	22	04	Bevins Branch
D5B	37	39	41	82	22	04	Bevins Branch
D6	37	39	46	82	22	12	Bevins Branch
D7	37	39	46	82	22	20	Bevins Branch
D8	37	39	46	82	22	20	Bevins Branch
Pond 1A	37	39	47	82	22	07	Bevins Branch

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
D1	Surface runoff	27.91 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D2	Surface runoff	13.32 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D3	Surface runoff	7.45 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D4	Surface runoff	18.11 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5	Surface runoff	33.60 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5A	Surface runoff	75.92 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5B	Surface runoff	50.06 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D6	Surface runoff	14.84 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D7	Surface runoff	13.90 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D8	Surface runoff	7.01 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
Pond 1A	Surface runoff	411.09 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

- C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐

Yes (Complete the following table.)

☒

No (Go to Section III.)

OUTFALL NUMBER (list)	OPERATIONS CONTRIBUTING FLOW (list)	FREQUENCY		FLOW				Duration (in days)
		Days Per Week (specify average)	Months Per Year (specify average)	Flow Rate (in mgd)		Total volume (specify with units)		
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ Yes (Complete Item III-B) List effluent guideline category:

☒ No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☐ Yes (Complete Item III-C)

☒ No (Go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐ Yes (Complete the following table)

☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE
NONE			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

- A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐

Yes (List all such pollutants below)

☒

No (Go to Item VI-B)

- B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐

Yes (Complete Item VI-C)

☒

No (Go to Item VII)

- C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (Identify the test(s) and describe their purposes below)

☒ No (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)

☒ No (Go to Section IX)

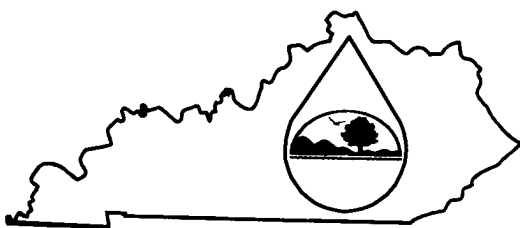
NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Randy L. Tackett, Agent	606-353-5500
SIGNATURE	DATE
<i>Randy L. Tackett</i>	8-22-07

Form HQAA



Kentucky Pollutant Discharge Elimination System (KPDES)

High Quality water Alternative Analysis

The Anti-degradation Implementation Procedures outlined in 401 KAR 5:030, Section 1(3)(b)5, allows an applicant who does not accept the effluent limitations required by sub-paragraphs 2 and 3 of 5:030, Section 1(2)(b), to demonstrate to the satisfaction of the Environmental and Public Protection Cabinet that no technologically or economically feasible alternatives exist, and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. The approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. This demonstration shall also include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

I. Permit Information

Facility Name:	Sidney Coal Company, Inc. KDMRE Permit ID. 898-0798	KPDES NO.:	KY0107140
Address:	P. O. Box 299	County:	Pike
City, State, Zip Code:	Sidney, KY 41564	Receiving Water Name:	Bevins Branch of Big Creek

II. Alternatives Analysis - For each alternative below, discuss what options were considered and state why these options were not considered feasible.

1. **Discharge to other treatment facilities.** Indicate which treatment works have been considered and provide the reasons why discharge to these works is not feasible.

Alternative treatment works have been investigated. It would cost over \$ 956,000 (7,775 feet of 24" dia. HDPE pipe at \$ 67/ft. and two lifting stations at \$ 218,000 ea.) to collect and gather the discharge, from the ten sediment dugouts and one pond, in this proposal. An in-ground collection reservoir would also be required or an above ground tank.

It would also take another \$ 13.1 million to run 24" dia. min. HDPE pipe for 37 miles at \$ 67/ft, plus, over \$ 8.1 million for (37) lifting stations @ one lift station (500,000 gpd) each mile for \$ 218,000 / station, to carry the water discharge to the nearest downstream municipal water treatment plant which is the Martin County Water Treatment Facility, approximately 37 miles away. The Martin County treatment plant would then require a sedimentation basin to remove the silt before even allowing the water to enter their plant.

2. **Use of other discharge locations.** Indicate what other discharge locations have been evaluated, and the reasons why these locations are not feasible.

As an alternative to discharging into Bevins Branch and Big Creek, Sidney Coal Company examined diverting drainage and runoff into unnamed tributaries of Big Creek, the nearest adjacent drains to the project area. However, any discharge into these alternate drains would ultimately discharge into the Tug Fork of the Big Sandy River, as would any discharge into Bevins Branch. Therefore, the use of these alternate drains would not prevent degradation of water quality in the Tug Fork of the Big Sandy River. Also, gathering and collecting the discharge from the proposed ponds would cost over \$956,000, as stated above. In addition to collecting the discharge, it would cost a minimum of \$207,000 (3,100 feet of 24" diameter HDPE pipe at \$67/ft.) to pump the discharge into the nearest adjacent tributary.

II. Alternatives Analysis – continued

3. **Water reuse or recycle.** Provide information about opportunities for water reuse or recycle at this facility. If water reuse or recycle is not a feasible alternative at this facility, please indicate the reasons why.

Water does play a key part in surface mining operations as far as misting/spraying the area to help alleviate airborne coal dust. However, the amount of water required for dust suppression is minimal compared to the discharge generated. Total watershed drainage area for discharge of dugouts, is over 370.58 acres with a combined peak discharge of over 238,000 gallons per minute. Water used for dust suppression in a day might be 12,000 gallons. Dust suppression is generally only required during dry times when the flow of the surface discharge is low or non-existent. No other water is need for recycling or reuse with this operation.

A small portion of the total discharge generated will be used for hydro-seeding when grade work is completed on this project. The cost has been estimated at over \$ 956,000 dollars to collect this water and to store the large volume generated would only add to the overall cost.

4. **Alternative process or treatment options.** Indicate what process or treatment options have been evaluated and provide the reasons they were not considered feasible.

Several alternatives to treating water from the project area and discharging it to streams and rivers in the area have been evaluated. These alternatives include construction of a water treatment facility, construction of physical filter barriers, chemical treatment of drainage, and construction of wetlands.

Water Treatment Facility Construction of a small water treatment facility (500,000 gallons per day) on the project site would cost over \$ 1.6 million dollars, plus an additional cost of approximately \$50,000 for a containment reservoir. This water treatment facility would not be able to manage the large amount of water required at this site (over 238,000 gallons per minute).

Physical Filter Barriers Silt fences and straw bales would not be able to handle the large discharge flow generated nor would they meet requirements of Commonwealth of Kentucky's Surface Mine Regulations as stated in 405 KAR 16:070 .

Chemical Treatment Chemical treatment of drainage was also considered. However, the primary treatment required at this site is the removal of sediments, which is not possible using chemical treatment.

Wetland Construction Constructed wetlands have traditionally been used for biological treatment. However, the discharge generated by this operation will require sedimentation control measures, and wetlands are not effective for treating sediment. Additionally, wetlands used for water treatment would require a great deal of additional property, which is not available in this particular project area.

II. Alternatives Analysis – continued

- 5. On-site or sub-surface disposal options.** Discuss the potential for on-site or subsurface disposal. If these options are not feasible, then please indicate the reasons why.

An alternative to surface discharge from the project area is sub-surface disposal. Deep mining has been conducted in vicinity of the project area. Therefore, the sub-surface disposal of drainage from the project area would present safety concerns for any present deep mining operations, and the cost is high, due to a lifting station (\$ 218,000), 24" dia. HDPE pipe to collect discharge (\$ 520,000), and possible drilling (an injection well, depending on depth, could cost up to \$ 50,000 per well to drill), required to inject the discharge underground. Injecting this discharge underground would increase the potential of an outcrop blow-out or blow-out from an old adit and would require a UIC Permit. A suitable place to inject, within a reasonable distance of this site, has not been found.

- 6. Evaluation of other alternatives to lowering water quality.** Describe any other alternatives that were evaluated and provide the reasons why these alternatives were not feasible.

Other alternatives reviewed were:

- a) accepting a high water quality requirement, and
- b) avoiding the project.

Accepting high water quality requirements would create additional burden and cost to this project because larger ponds would have to be built. For the embankment ponds, this means more disturbances in the streams, larger volumes of water stored behind the embankments, and higher construction/removal costs (approximately \$15,000 per pond).

Avoiding this project would mean that the advantages of economic development in the surrounding small communities such as Sidney, KY, in Pike county would not be realized. At a minimum, 50 local jobs would be lost, the tax base would diminish (\$ 80,834 in severance taxes would not be collected), and local businesses would not prosper to the same extent.

III. Socio-economic Demonstration

1. State the positive and beneficial effects of this facility on the existing environment or a public health problem.

This area in Pike County has been previously mined and logged, with the discharge from those areas presently flowing untreated into area streams. Sidney Coal Company, Inc. proposes to build ten dugout ponds and one embankment pond to treat this watershed discharge. The area will also be re-graded to prevent erosion from the previous logging activities.

2. Describe this facility's effect on the employment of the area.

This mining operation would provide employment for an estimated (50) employees. These mining positions will prove to be higher paying jobs than other industries in Pike county, specifically near small communities such as Sidney, KY. The average weekly wage in the mining industry for Pike county is \$ 887.25. This is compared to the average weekly wage for all other industries in Pike County of \$ 502.50 (2003 U. S. Bureau of Labor Statistics).

3. Describe how this facility will increase or avoid the decrease of area employment.

The economy in this portion of Pike County is dependent on the Mining Industry. Therefore, this operation will provide for the continuation of higher wage permanent employment in the area work force. This also positively affects the support industries that will help to supply the material and equipment needed for mining, as well as other services such as engineering, and also the training that will be needed for employees to work in the mines. It is likely that a new mine will lead to an increase in employment, but at the very least, the mine will avoid a decrease in local employment figures.

4. Describe the industrial or commercial benefits to the community, including the creation of jobs, the raising of additional revenues, the creation of new or additional tax bases.

The surface mine facility will provide jobs in Pike County, in small communities such as Sidney, KY, and help prevent the loss of jobs when an existing area facility closes or moves to another area. Recovery of the coal, located along Bevins Branch, will produce over 738,200 tons of coal. This will generate over \$ 538,894 in severance taxes, at approximately \$ 0.73 cents/ton, of which Pike county will receive a total of over \$ 80,834 (15 percent). Additional revenue will be given to local businesses generated through increased employment to handle support services catering to the mining operation directly and to the needs of the employees on a daily basis. Local income taxes, property taxes, and sales taxes, will also add to revenue brought in by the mining facility.

These monies will be returned to the community providing funds to help establish alternative industries for additional local employment opportunities, as well as provide for public safety, environmental protection, public transportation, vocational training, local health / recreational / educational facilities, social services, industrial/economic development, workforce training, and the secondary wood industry. Property values increase when land is active. Therefore, when mining is being conducted, the land has an increased value requiring increased property taxes to be paid in to the city operating fund.

5. Describe any other economic or social benefits to the community.

This facility will not only provide mining jobs but will also provide jobs that help support the mining industry. Equipment sales and repair, mining and engineering consultants, along with fuel and transportation providers, will be needed as a result of the mine. The creation of more jobs in the surrounding communities such as Sidney, KY in Pike county, will spur community development, thus creating even more employment opportunities in the local area.

The increased payments of property taxes will benefit schools so that they have funding to purchase better equipment, improve their facilities, and increased salaries for the teachers. In addition, the increased tax payments will provide additional money for government services to better serve the local area citizens.

III. Socio-economic Demonstration – continued

6. Will this project be likely to change median household income in the county?

Yes

No



7. Will this project likely change the market value of taxable property in the county?



8. Will this project increase or decrease revenues in the county?



9. Will any public buildings be affected by this system?



10. How many households will be *economically* or *socially* impacted by this project?

It is estimated that (50) workers will be employed by the project. Thus, (50) households will be directly affected by the operation. These households will, in turn, affect at least 1.5 times additional households (75), of local business owners and their employees by purchasing goods and services in the area.

11. How will those households (if any) be *economically* or *socially* impacted?

(For example, through creation of jobs, educational opportunities, or other social or economic benefits)

The households of the estimated (50) facility employees will be positively impacted by the higher than average income that these mining jobs will provide. The average weekly wage for the mining industry in Pike county is \$ 887.25. The average weekly wage for all other industries in Pike county is \$ 502.50.

Additionally, many other households will be impacted by the increased business for local retailers and their employees in Pike county, engineering services, and fuel/transportation providers, particularly around small communities such as Sidney, KY. The employees of these support businesses will be positively impacted with a more secure place of employment due to the increased revenue given by the mining industry.

	Yes	No
<p>12. Does this project replace any other methods of sewage treatment to existing facilities? If so, describe how. <input type="checkbox"/> <input checked="" type="checkbox"/></p> <p>The proposed project is a surface mining operation. There are no existing sewage waste water discharges that this project could replace.</p>		
<p>13. Does this project treat any existing sources of pollution more effectively? If so, describe how. <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>The discharge proposed in this application amendment will be in areas that have been mined and logged before. Presently, there are approximately 370.58 acres of uncontrolled runoff from this area. Any runoff from these drainage areas into area streams will now be treated by the proposed sediment control structures.</p>		

III. Socio-Economic Demonstration - continued

	Yes	No
<p>14. Does this project eliminate any other sources of discharge or pollutants? If so, describe how. <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>The Bevens Branch watershed has been previously mined and logged. With the re-mining proposed in this project, runoff pollution will be eliminated through reclamation instead of the current uncontrolled runoff into area streams.</p>		
<p>15. How will the increase in production levels positively affect the socio-economic condition of the area?</p> <p>The increase in productivity levels is not only providing jobs for this operation at a higher than average weekly mining wage of \$ 887.25 in Pike county, versus all other industry wages of \$ 502.50 in Pike county, but will create additional revenue for the existing businesses in and around Pike county. The additional revenue of the local businesses and the severance tax dollars for Pike county generated by this project (over \$ 80,834 dollars), will provide the local government increased benefits in public safety (law enforcement, fire protection, ambulance services) and also aid in the industrial and economic development in the surrounding communities such as Sidney, KY in Pike county.</p>		
<p>16. How will the increase in operational efficiency positively affect the socio-economic condition of the area?</p> <p>The proposed method of coal extraction is the most efficient and economical method for this particular site. This method allows for maximum removal of coal reserves, increasing the amount of tax dollars that contribute to the state and local economy, and providing more jobs for people in the surrounding community. The facility will continue to provide employment to an estimated 50 workers during the life of the operation. The project will also help to provide as many as 75 additional jobs in other sectors of the economy, such as engineering, fuel, and transportation. Therefore, the proposed mining operations positively affect the local economy more than other industries.</p>		

IV Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Title:	Randy L. Tackett, Agent	Telephone No.:	(606) 353- 5500
Signature:	<i>Randy L. Tackett</i>	Date:	9-06-07

September 2007

Form 1, Form C, and Form HQAA
KPDES INDIVIDUAL PERMIT COVERAGE APPLICATION

Sidney Coal Company, Inc.
KDMRE PERMIT No. 898-0798
Bevins Branch Surface Mine

Prepared for:

Sidney Coal Company, Inc.
P.O. Box 299
Sidney, KY 41564

Prepared by:

Summit Engineering, Inc.
131 Summit Drive
Pikeville, KY 41501
Telephone: (606) 432-1447



SUMMIT ENGINEERING, INC.

September 6, 2007

Erin Wright
Inventory & Data Management Section
KPDES Branch
Division of Water
14 Reilly Road
Frankfort, Kentucky 40601

RE: Sidney Coal Company, Inc.
KDMRE Permit No. 898-0798
Bevins Branch Surface Mine

Dear Erin:

Please find enclosed copy of a completed Form 1, Form C, and Form HQAA for the above-referenced surface mine to be located in Pike County. Sidney Coal Company seeks approval for Individual Permit coverage under KPDES, for their proposed mining activities.

If you have any questions, or require additional information, please call me at (606) 432-1447 ext. 309 or e-mail mhamilton@summit-engr.com.

Regards,

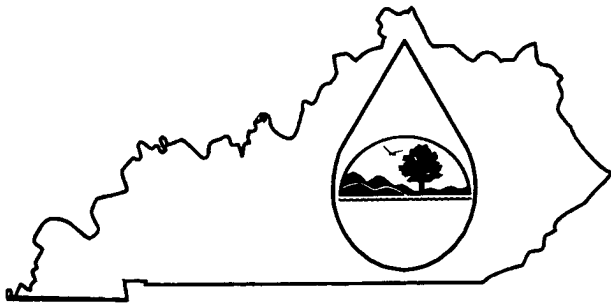
Misty D. Hamilton

Misty D. Hamilton
Environmental Project Manager

c: file

enclosure

KPDES FORM 1



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

This is an application to: (check one)

- ☒ Apply for a new permit.
☐ Apply for reissuance of expiring permit.
☐ Apply for a construction permit.
☐ Modify an existing permit.

Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:

Form A, Form B, Form C, Form F, or Short Form C

For additional information contact:

KPDES Branch (502) 564-3410

I. FACILITY LOCATION AND CONTACT INFORMATION

AGENCY
USE

A. Name of business, municipality, company, etc. requesting permit

Sidney Coal Company, Inc.

B. Facility Name and Location

Facility Location Name:

Bevins Branch Surface Mine

Facility Location Address (i.e. street, road, etc.):

Near the junction of Rt. 468 and Rockhouse Fork Road

Facility Location City, State, Zip Code:

Sidney, KY 41564

C. Facility Owner/Mailing Address

Owner Name:

Sidney Coal Company, Inc.

Mailing Street:

P. O. Box 299

Mailing City, State, Zip Code:

Sidney, KY 41564

Telephone Number:

(606) 353-7201

II. FACILITY DESCRIPTION

A. Provide a brief description of activities, products, etc: **Surface coal mining**

B. Standard Industrial Classification (SIC) Code and Description

Principal SIC Code &
Description:

1221 - Bituminous Coal & Lignite Mining

Other SIC Codes:

III. FACILITY LOCATION

A. Attach a U.S. Geological Survey 7 ½ minute quadrangle map for the site. (See instructions)

B. County where facility is located:

Pike

City where facility is located (if applicable):

C. Body of water receiving discharge:

Big Creek

D. Facility Site Latitude (degrees, minutes, seconds):

37° 39' 47" N

Facility Site Longitude (degrees, minutes, seconds):

82° 22' 05" W

E. Method used to obtain latitude & longitude (see instructions): **Topographic map coordinates**

F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):

IV. OWNER/OPERATOR INFORMATION**A. Type of Ownership:**☐ Publicly Owned ☒ Privately Owned ☐ State Owned ☐ Both Public and Private Owned ☐ Federally owned**B. Operator Contact Information (See instructions)**

Name of Treatment Plant Operator:

Sidney Coal Company, Inc.

Telephone Number:

(606) 353-7201

Operator Mailing Address (Street):

P. O. Box 299

Operator Mailing Address (City, State, Zip Code):

Sidney, KY 41564

Is the operator also the owner?

Yes ☒ No ☐

Is the operator certified? If yes, list certification class and number below.

Yes ☐ No ☒

Certification Class:

Certification Number:

V. EXISTING ENVIRONMENTAL PERMITS

Current NPDES Number:

Issue Date of Current Permit:

Expiration Date of Current Permit:

Number of Times Permit Reissued:

Date of Original Permit Issuance:

Sludge Disposal Permit Number:

Kentucky DOW Operational Permit #:

Kentucky DSMRE Permit Number(s):

898-0798

C. Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source		
Solid or Special Waste		
Hazardous Waste - Registration or Permit		

VI. DISCHARGE MONITORING REPORTS (DMRs)

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). The information in this section serves to specifically identify the department, office or individual you designate as responsible for submitting DMR forms to the Division of Water.

A. Name of department, office or official submitting DMRs:	Randy Tackett, Agent
B. Address where DMR forms are to be sent. (Complete only if address is different from mailing address in Section I.)	
DMR Mailing Name:	
DMR Mailing Street:	
DMR Mailing City, State, Zip Code:	
DMR Official Telephone Number:	

VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. Descriptions of the base fee amounts are given in the "General Instructions."

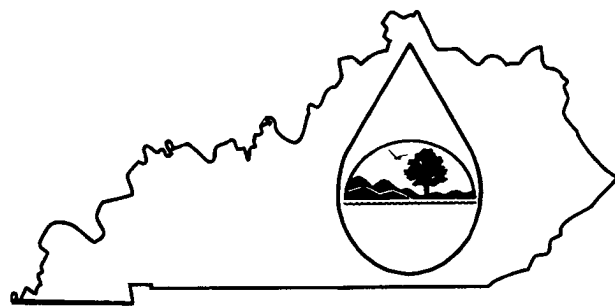
Facility Fee Category:	Filing Fee Enclosed:
Surface Mining Operation	\$240.00

VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Randy L. Tackett, Agent	606-353-5500
SIGNATURE	DATE:
<i>Randy L. Tackett</i>	8-22-07

KPDES FORM C



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Bevins Branch Surface Mine	County: Pike						
I. OUTFALL LOCATION	AGENCY USE						

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
D1	37	40	05	82	22	32	Big Creek
D2	37	40	02	82	22	34	Big Creek
D3	37	39	55	82	22	31	Big Creek
D4	37	39	53	82	22	24	Bevins Branch
D5	37	39	53	82	22	16	Bevins Branch
D5A	37	39	52	82	22	04	Bevins Branch
D5B	37	39	41	82	22	04	Bevins Branch
D6	37	39	46	82	22	12	Bevins Branch
D7	37	39	46	82	22	20	Bevins Branch
D8	37	39	46	82	22	20	Bevins Branch
Pond 1A	37	39	47	82	22	07	Bevins Branch

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
D1	Surface runoff	27.91 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D2	Surface runoff	13.32 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D3	Surface runoff	7.45 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D4	Surface runoff	18.11 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5	Surface runoff	33.60 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5A	Surface runoff	75.92 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5B	Surface runoff	50.06 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D6	Surface runoff	14.84 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D7	Surface runoff	13.90 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D8	Surface runoff	7.01 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
Pond 1A	Surface runoff	411.09 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

- C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐

Yes (Complete the following table.)

☒

No (Go to Section III.)

OUTFALL NUMBER	OPERATIONS CONTRIBUTING FLOW	FREQUENCY		FLOW				
		Days Per Week	Months Per Year	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	
(list)	(list)	(specify average)	(specify average)					

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ Yes (Complete Item III-B) List effluent guideline category:

☒ No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☐ Yes (Complete Item III-C)

☒ No (Go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐ Yes (Complete the following table)

☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE
NONE			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐

Yes (List all such pollutants below)

☒

No (Go to Item VI-B)

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐

Yes (Complete Item VI-C)

☒

No (Go to Item VII)

C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (Identify the test(s) and describe their purposes below)

☒ No (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)

☒ No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print): Randy L. Tackett, Agent	TELEPHONE NUMBER (area code and number): 606-353-5500
SIGNATURE <i>Randy L. Tackett</i>	DATE 8-22-07

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)										OUTFALL NO.	
Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.											
1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	b. No of Analyses	
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass					
a. Biochemical Oxygen Demand (BOD)											
b. Chemical Oxygen Demand (COD)											
c. Total Organic Carbon (TOC)											
d. Total Suspended Solids (TSS)											
e. Ammonia (as N)											
f. Flow (in units of MGD)	VALUE		VALUE		VALUE			MGD		VALUE	
g. Temperature (winter)	VALUE		VALUE		VALUE			°C		VALUE	
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE	
i. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM				STANDARD UNITS			

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		6. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Bromide (24959-67-9)														
b. Bromine Total Residual														
c. Chloride														
d. Chlorine, Total Residual														
e. Color														
f. Fecal Coliform														
g. Fluoride (16984-48-8)														
h. Hardness (as CaCO ₃)														
i. Nitrate – Nitrite (as N)														
j. Nitrogen, Total Organic (as N)														
k. Oil and Grease														
l. Phosphorous (as P), Total 7723-14-0														
m. Radioactivity														
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium Total														
(4) Radium, 226, Total														

Part B - Continued														
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
n. Sulfate (as SO ₄) (14808-79-8)														
o. Sulfide (as S)														
p. Sulfite (as SO ₃) (14286-46-3)														
q. Surfactants														
r. Aluminum, Total (7429-90)														
s. Barium, Total (7440-39-3)														
t. Boron, Total (7440-42-8)														
u. Cobalt, Total (7440-48-4)														
v. Iron, Total (7439-89-6)														
w. Magnesium Total (7439-96-4)														
x. Molybdenum Total (7439-98-7)														
y. Manganese, Total (7439-96-6)														
z. Tin, Total (7440-31-5)														
aa. Titanium, Total (7440-32-6)														

Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the **Testing Required** column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark "X" in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark "X" in the **Believed Absent** column for each pollutant you believe to be absent. If you mark either the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No. of Analyses
				Maximum Daily Value (1)	Value (2)	Value (1)	Value (2)	Value (1)	Value (2)				Long-Term Avg Value (1)	Value (2)	
METALS, CYANIDE AND TOTAL PHENOLS															
1M. Antimony Total (7440-36-0)															
2M. Arsenic, Total (7440-38-2)															
3M. Beryllium Total (7440-41-7)															
4M. Cadmium Total (7440-43-9)															
5M. Chromium Total (7440-43-9)															
6M. Copper Total (7550-50-8)															
7M. Lead Total (7439-92-1)															
8M. Mercury Total (7439-97-6)															
9M. Nickel, Total (7440-02-0)															
10M. Selenium, Total (7782-49-2)															
11M. Silver, Total (7440-28-0)															

Part C - Continued

1. POLLUTANT And CAS NO. (if available)		2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses			
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass									
METALS, CYANIDE AND TOTAL PHENOLS (Continued)																	
12M. Thallium, Total (7440-28-0)																	
13M. Zinc, Total (7440-66-6)																	
14M. Cyanide, Total (57-12-5)																	
15M. Phenols, Total																	
DIOXIN																	
2,3,7,8 Tetra- chlorodibenzo, p, Dioxin (1784-01-6)				DESCRIBE RESULTS:													
GC/MS FRACTION - VOLATILE COMPOUNDS																	
1V. Acrolein (107-02-8)																	
2V. Acrylonitrile (107-13-1)																	
3V. Benzene (71-43-2)																	
5V. Bromoform (75-25-2)																	
6V. Carbon Tetrachloride (56-23-5)																	
7V. Chloro- benzene (108-90-7)																	
8V. Chlorodibro- m methane (124-48-1)																	

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass							
9V. Chloroethane (74-00-3)																
10V. 2-Chloro- ethylvinyl Ether (110-75-8)																
11V. Chloroform (67-66-3)																
12V. Dichloro- bromomethane (75-71-8)																
14V. 1,1- Dichloroethane (75-34-3)																
15V. 1,2- Dichloroethane (107-06-2)																
16V. 1,1- Dichloroethylene (75-35-4)																
17V. 1,2-Di- chloropropane (78-87-5)																
18V. 1,3- Dichloropro- pylene (452-75-6)																
19V. Ethyl- benzene (100-41-4)																
20V. Methyl Bromide (74-83-9)																

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
21V. Methyl Chloride (74-87-3)															
22V. Methylene Chloride (75-00-2)															
23V. 1,1,2,2- Tetrachloro- ethane (79-34-5)															
24V. Tetrachloro- ethylene (127-18-4)															
25V. Toluene (108-88-3)															
26V. 1,2-Trans- Dichloro- ethylene (156-60-5)															
27V. 1,1,1-Tri- chloroethane (71-55-6)															
28V. 1,1,2-Tri- chloroethane (79-00-5)															
29V. Trichloro- ethylene (79-01-6)															
30V. Vinyl Chloride (75-01-4)															

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2 MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chloro-phenol (95-57-8)															
2A. 2,4-Dichlor-Orophenol (120-83-2)															
3A. 2,4-Dimeth-ylphenol (105-67-9)															
4A. 4,6-Dinitro-o-cresol (534-52-1)															
5A. 2,4-Dinitro-phenol (51-28-5)															
6A. 2-Nitro-phenol (88-75-5)															
7A. 4-Nitro-phenol (100-02-7)															
8A. P-chloro-m-cresol (59-50-7)															
9A. Pentachloro-phenol (87-88-5)															
10A. Phenol (108-05-2)															
11A. 2,4,6-Tri-chlorophenol (88-06-2)															
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
B. Acena-phthene (83-32-9)															

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2 MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)																
2B. Acena- phy/ene (208-96-8)																
3B. Anthra- cene (120-12-7)																
4B. Benzidine (92-87-5)																
5B. Benzo(a)- anthracene (56-55-3)																
6B. Benzo(a)- pyrene (50-32-8)																
7B. 3,4-Benzo- fluoranthene (205-99-2)																
8B. Benzo(ghi) perylene (191-24-2)																
9B. Benzo(k)- fluoranthene (207-08-9)																
10B. Bis(2- chlor- oethoxy)- methane (111-91-1)																
11B. Bis (2-chlor- oisopropyl)- Ether																
12B. Bis (2-ethyl- hexyl)- phthalate (117-81-7)																

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
G/CMS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)																
13B. 4-Bromo-phenyl Phenyl ether (101-55-3)																
14B. Butyl-benzyl phthalate (85-68-7)																
15B. 2-Chloro-naphthalene (7005-72-3)																
16B. 4-Chloro-phenyl phenyl ether (7005-72-3)																
17B. Chrysene (218-01-9)																
18B. Dibenzo-(a,h) Anthracene (53-70-3)																
19B. 1,2-Dichloro-benzene (95-50-1)																
20B. 1,3-Dichloro-Benzene (541-73-1)																
21B. 1,4-Dichloro-benzene (106-46-7)																
22B. 3,3-Dichloro-benzidine (91-94-1)																
23B. Diethyl Phthalate (84-66-2)																

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
24B. Dimethyl Phthalate (131-11-3)															
25B. Di-N- butyl Phthalate (84-74-2)															
26B. 2,4-Dinitro- toluene (121-14-2)															
27B. 2,6-Dinitro- toluene (606-20-2)															
28B. Di-n-octyl Phthalate (117-84-0)															
29B. 1,2- diphenyl- hydrazine (as azonbenzene) (122-66-7)															
30B. Fluoranthene (208-44-0)															
31B. Fluorene (86-73-7)															
32B. Hexachloro- benzene (118-71-1)															
33B. Hexachloro- butadiene (87-68-3)															
34B. Hexachloro- cyclopenta- diene (77-47-4)															

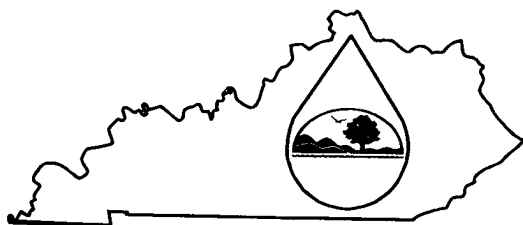
Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
35B. Hexachloroethane (67-72-1)															
36B. Indeno-(1,2,3-oc)-Pyrene (193-39-5)															
37B. Isophorone (78-59-1)															
38B. Naphthalene (91-20-3)															
39B. Nitrobenzene (98-95-3)															
40B. N-Nitrosodimethylamine (62-75-9)															
41B. N-nitrosodi-n-propylamine (621-64-7)															
42B. N-nitrosodiphenylamine (86-30-6)															
43B. Phenanthrene (85-01-8)															
44B. Pyrene (129-00-0)															
45B. 1,2,4 Tri-chlorobenzene (120-82-1)															

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
GC/MS FRACTION – PESTICIDES																
1P. Aldrin (309-00-2)																
2P. α-BHC (319-84-6)																
3P. β-BHC (58-89-9)																
4P. gamma-BHC (58-89-9)																
5P. δ-BHC (319-86-8)																
6P. Chlordane (57-74-9)																
7P. 4,4'-DDT (50-29-3)																
8P. 4,4'-DDE (72-55-9)																
9P. 4,4'-DDD (72-54-8)																
10P. Dieldrin (60-57-1)																
11P. α- Endosulfan (115-29-7)																
12P. β- Endosulfan (115-29-7)																
13P. Endosulfan Sulfate (1031-07-8)																
14P. Endrin (72-20-8)																

Part C - Continued

1. POLLUTANT And CAS NO. (if available)		2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses			
				Concentration (1)	Mass (2)	Concentration (1)	Mass (2)	Concentration (1)	Mass (2)				Concentration (1)	Mass (2)				
GC/MS FRACTION - PESTICIDES																		
15P. Endrin Aldehyde (7421-93-4)																		
16P. Heptachlor (76-44-8)																		
17P. Heptachlor Epoxide (1024-57-3)																		
18P. PCB-1242 (53469-21-9)																		
19P. PCB-1254 (11097-69-1)																		
20P. PCB-1221 (11104-28-2)																		
21P. PCB-1232 (11141-16-5)																		
22P. PCB-1248 (12672-29-6)																		
23P. PCB-1260 (11096-82-5)																		
24P. PCB-1016 (12674-11-2)																		
25P. Toxaphene (8001-35-2)																		



Kentucky Pollutant Discharge Elimination System (KPDES)

High Quality water Alternative Analysis

The Anti-degradation Implementation Procedures outlined in 401 KAR 5:030, Section 1(3)(b)5, allows an applicant who does not accept the effluent limitations required by sub-paragraphs 2 and 3 of 5:030, Section 1(2)(b), to demonstrate to the satisfaction of the Environmental and Public Protection Cabinet that no technologically or economically feasible alternatives exist, and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. The approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. This demonstration shall also include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

I. Permit Information

Facility Name:	Sidney Coal Company, Inc. KDMRE Permit ID. 898-0798	KPDES NO.:	
Address:	P. O. Box 299	County:	Pike
City, State, Zip Code:	Sidney, KY 41564	Receiving Water Name:	Bevins Branch of Big Creek

II. Alternatives Analysis - For each alternative below, discuss what options were considered and state why these options were not considered feasible.

1. Discharge to other treatment facilities. Indicate which treatment works have been considered and provide the reasons why discharge to these works is not feasible.

Alternative treatment works have been investigated. It would cost over \$ 956,000 (7,775 feet of 24" dia. HDPE pipe at \$ 67/ft. and two lifting stations at \$ 218,000 ea.) to collect and gather the discharge, from the ten sediment dugouts and one pond, in this proposal. An in-ground collection reservoir would also be required or an above ground tank.

It would also take another \$ 13.1 million to run 24" dia. min. HDPE pipe for 37 miles at \$ 67/ft, plus, over \$ 8.1 million for (37) lifting stations @ one lift station (500,000 gpd) each mile for \$ 218,000 / station, to carry the water discharge to the nearest downstream municipal water treatment plant which is the Martin County Water Treatment Facility, approximately 37 miles away. The Martin County treatment plant would then require a sedimentation basin to remove the silt before even allowing the water to enter their plant.

2. Use of other discharge locations. Indicate what other discharge locations have been evaluated, and the reasons why these locations are not feasible.

As an alternative to discharging into Bevins Branch and Big Creek, Sidney Coal Company examined diverting drainage and runoff into unnamed tributaries of Big Creek, the nearest adjacent drains to the project area. However, any discharge into these alternate drains would ultimately discharge into the Tug Fork of the Big Sandy River, as would any discharge into Bevins Branch. Therefore, the use of these alternate drains would not prevent degradation of water quality in the Tug Fork of the Big Sandy River. Also, gathering and collecting the discharge from the proposed ponds would cost over \$956,000, as stated above. In addition to collecting the discharge, it would cost a minimum of \$207,000 (3,100 feet of 24" diameter HDPE pipe at \$67/ft.) to pump the discharge into the nearest adjacent tributary.

II. Alternatives Analysis – continued

3. **Water reuse or recycle.** Provide information about opportunities for water reuse or recycle at this facility. If water reuse or recycle is not a feasible alternative at this facility, please indicate the reasons why.

Water does play a key part in surface mining operations as far as misting/spraying the area to help alleviate airborne coal dust. However, the amount of water required for dust suppression is minimal compared to the discharge generated. Total watershed drainage area for discharge of dugouts, is over 370.58 acres with a combined peak discharge of over 238,000 gallons per minute. Water used for dust suppression in a day might be 12,000 gallons. Dust suppression is generally only required during dry times when the flow of the surface discharge is low or non-existent. No other water is need for recycling or reuse with this operation.

A small portion of the total discharge generated will be used for hydro-seeding when grade work is completed on this project. The cost has been estimated at over \$ 956,000 dollars to collect this water and to store the large volume generated would only add to the overall cost.

4. **Alternative process or treatment options.** Indicate what process or treatment options have been evaluated and provide the reasons they were not considered feasible.

Several alternatives to treating water from the project area and discharging it to streams and rivers in the area have been evaluated. These alternatives include construction of a water treatment facility, construction of physical filter barriers, chemical treatment of drainage, and construction of wetlands.

Water Treatment Facility Construction of a small water treatment facility (500,000 gallons per day) on the project site would cost over \$ 1.6 million dollars, plus an additional cost of approximately \$50,000 for a containment reservoir. This water treatment facility would not be able to manage the large amount of water required at this site (over 238,000 gallons per minute).

Physical Filter Barriers Silt fences and straw bales would not be able to handle the large discharge flow generated nor would they meet requirements of Commonwealth of Kentucky's Surface Mine Regulations as stated in 405 KAR 16:070 .

Chemical Treatment Chemical treatment of drainage was also considered. However, the primary treatment required at this site is the removal of sediments, which is not possible using chemical treatment.

Wetland Construction Constructed wetlands have traditionally been used for biological treatment. However, the discharge generated by this operation will require sedimentation control measures, and wetlands are not effective for treating sediment. Additionally, wetlands used for water treatment would require a great deal of additional property, which is not available in this particular project area.

II. Alternatives Analysis – continued

- 5. On-site or sub-surface disposal options.** Discuss the potential for on-site or subsurface disposal. If these options are not feasible, then please indicate the reasons why.

An alternative to surface discharge from the project area is sub-surface disposal. Deep mining has been conducted in vicinity of the project area. Therefore, the sub-surface disposal of drainage from the project area would present safety concerns for any present deep mining operations, and the cost is high, due to a lifting station (\$ 218,000), 24" dia. HDPE pipe to collect discharge (\$ 520,000), and possible drilling (an injection well, depending on depth, could cost up to \$ 50,000 per well to drill), required to inject the discharge underground. Injecting this discharge underground would increase the potential of an outcrop blow-out or blow-out from an old adit and would require a UIC Permit. A suitable place to inject, within a reasonable distance of this site, has not been found.

- 6. Evaluation of other alternatives to lowering water quality.** Describe any other alternatives that were evaluated and provide the reasons why these alternatives were not feasible.

Other alternatives reviewed were:

- a) accepting a high water quality requirement, and
- b) avoiding the project.

Accepting high water quality requirements would create additional burden and cost to this project because larger ponds would have to be built. For the embankment ponds, this means more disturbances in the streams, larger volumes of water stored behind the embankments, and higher construction/removal costs (approximately \$15,000 per pond).

Avoiding this project would mean that the advantages of economic development in the surrounding small communities such as Sidney, KY, in Pike county would not be realized. At a minimum, 50 local jobs would be lost, the tax base would diminish (\$ 80,834 in severance taxes would not be collected), and local businesses would not prosper to the same extent.

III. Socio-economic Demonstration

1. State the positive and beneficial effects of this facility on the existing environment or a public health problem.

This area in Pike County has been previously mined and logged, with the discharge from those areas presently flowing untreated into area streams. Sidney Coal Company, Inc. proposes to build ten dugout ponds and one embankment pond to treat this watershed discharge. The area will also be re-graded to prevent erosion from the previous logging activities.

2. Describe this facility's effect on the employment of the area.

This mining operation would provide employment for an estimated (50) employees. These mining positions will prove to be higher paying jobs than other industries in Pike county, specifically near small communities such as Sidney, KY. The average weekly wage in the mining industry for Pike county is \$ 887.25. This is compared to the average weekly wage for all other industries in Pike County of \$ 502.50 (2003 U. S. Bureau of Labor Statistics).

3. Describe how this facility will increase or avoid the decrease of area employment.

The economy in this portion of Pike County is dependent on the Mining Industry. Therefore, this operation will provide for the continuation of higher wage permanent employment in the area work force. This also positively affects the support industries that will help to supply the material and equipment needed for mining, as well as other services such as engineering, and also the training that will be needed for employees to work in the mines. It is likely that a new mine will lead to an increase in employment, but at the very least, the mine will avoid a decrease in local employment figures.

4. Describe the industrial or commercial benefits to the community, including the creation of jobs, the raising of additional revenues, the creation of new or additional tax bases.

The surface mine facility will provide jobs in Pike County, in small communities such as Sidney, KY, and help prevent the loss of jobs when an existing area facility closes or moves to another area. Recovery of the coal, located along Bevins Branch, will produce over 738,200 tons of coal. This will generate over \$ 538,894 in severance taxes, at approximately \$ 0.73 cents/ton, of which Pike county will receive a total of over \$ 80,834 (15 percent). Additional revenue will be given to local businesses generated through increased employment to handle support services catering to the mining operation directly and to the needs of the employees on a daily basis. Local income taxes, property taxes, and sales taxes, will also add to revenue brought in by the mining facility.

These monies will be returned to the community providing funds to help establish alternative industries for additional local employment opportunities, as well as provide for public safety, environmental protection, public transportation, vocational training, local health / recreational / educational facilities, social services, industrial/economic development, workforce training, and the secondary wood industry. Property values increase when land is active. Therefore, when mining is being conducted, the land has an increased value requiring increased property taxes to be paid in to the city operating fund.

5. Describe any other economic or social benefits to the community.

This facility will not only provide mining jobs but will also provide jobs that help support the mining industry. Equipment sales and repair, mining and engineering consultants, along with fuel and transportation providers, will be needed as a result of the mine. The creation of more jobs in the surrounding communities such as Sidney, KY in Pike county, will spur community development, thus creating even more employment opportunities in the local area.

The increased payments of property taxes will benefit schools so that they have funding to purchase better equipment, improve their facilities, and increased salaries for the teachers. In addition, the increased tax payments will provide additional money for government services to better serve the local area citizens.

III. Socio-economic Demonstration – continued

6. Will this project be likely to change median household income in the county?

Yes No

☒ ☐

7. Will this project likely change the market value of taxable property in the county?

☒ ☐

8. Will this project increase or decrease revenues in the county?

☒ ☐

9. Will any public buildings be affected by this system?

☐ ☒

10. How many households will be *economically* or *socially* impacted by this project?

It is estimated that (50) workers will be employed by the project. Thus, (50) households will be directly affected by the operation. These households will, in turn, affect at least 1.5 times additional households (75), of local business owners and their employees by purchasing goods and services in the area.

11. How will those households (if any) be *economically* or *socially* impacted?

(For example, through creation of jobs, educational opportunities, or other social or economic benefits)

The households of the estimated (50) facility employees will be positively impacted by the higher than average income that these mining jobs will provide. The average weekly wage for the mining industry in Pike county is \$ 887.25. The average weekly wage for all other industries in Pike county is \$ 502.50.

Additionally, many other households will be impacted by the increased business for local retailers and their employees in Pike county, engineering services, and fuel/transportation providers, particularly around small communities such as Sidney, KY. The employees of these support businesses will be positively impacted with a more secure place of employment due to the increased revenue given by the mining industry.

	Yes	No
<p>12. Does this project replace any other methods of sewage treatment to existing facilities? If so, describe how. <input type="checkbox"/> <input checked="" type="checkbox"/></p> <p>The proposed project is a surface mining operation. There are no existing sewage waste water discharges that this project could replace.</p>		
Yes No		
<p>13. Does this project treat any existing sources of pollution more effectively? If so, describe how. <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>The discharge proposed in this application amendment will be in areas that have been mined and logged before. Presently, there are approximately 370.58 acres of uncontrolled runoff from this area. Any runoff from these drainage areas into area streams will now be treated by the proposed sediment control structures.</p>		

III. Socio-Economic Demonstration - continued

	Yes	No
<p>14. Does this project eliminate any other sources of discharge or pollutants? If so, describe how. <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>The Bevins Branch watershed has been previously mined and logged. With the re-mining proposed in this project, runoff pollution will be eliminated through reclamation instead of the current uncontrolled runoff into area streams.</p>		
<p>15. How will the increase in production levels positively affect the socio-economic condition of the area?</p> <p>The increase in productivity levels is not only providing jobs for this operation at a higher than average weekly mining wage of \$ 887.25 in Pike county, versus all other industry wages of \$ 502.50 in Pike county, but will create additional revenue for the existing businesses in and around Pike county. The additional revenue of the local businesses and the severance tax dollars for Pike county generated by this project (over \$ 80,834 dollars), will provide the local government increased benefits in public safety (law enforcement, fire protection, ambulance services) and also aid in the industrial and economic development in the surrounding communities such as Sidney, KY in Pike county.</p>		
<p>16. How will the increase in operational efficiency positively affect the socio-economic condition of the area?</p> <p>The proposed method of coal extraction is the most efficient and economical method for this particular site. This method allows for maximum removal of coal reserves, increasing the amount of tax dollars that contribute to the state and local economy, and providing more jobs for people in the surrounding community. The facility will continue to provide employment to an estimated 50 workers during the life of the operation. The project will also help to provide as many as 75 additional jobs in other sectors of the economy, such as engineering, fuel, and transportation. Therefore, the proposed mining operations positively affect the local economy more than other industries.</p>		

IV Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Title:	Randy L. Tackett, Agent	Telephone No.:	(606) 353- 5500
Signature:	<i>Randy L. Tackett</i>	Date:	9-06-07

September 2007

Form 1, Form C, and Form HQAA
KPDES INDIVIDUAL PERMIT COVERAGE APPLICATION

Sidney Coal Company, Inc.
KDMRE PERMIT No. 898-0798
Bevins Branch Surface Mine

Prepared for:

Sidney Coal Company, Inc.
P.O. Box 299
Sidney, KY 41564

Prepared by:

Summit Engineering, Inc.
131 Summit Drive
Pikeville, KY 41501
Telephone: (606) 432-1447



SUMMIT ENGINEERING, INC.

September 6, 2007

Erin Wright
Inventory & Data Management Section
KPDES Branch
Division of Water
14 Reilly Road
Frankfort, Kentucky 40601

RE: Sidney Coal Company, Inc.
KDMRE Permit No. 898-0798
Bevins Branch Surface Mine

Dear Erin:

Please find enclosed copy of a completed Form 1, Form C, and Form HQAA for the above-referenced surface mine to be located in Pike County. Sidney Coal Company seeks approval for Individual Permit coverage under KPDES, for their proposed mining activities.

If you have any questions, or require additional information, please call me at (606) 432-1447 ext. 309 or e-mail mhamilton@summit-engr.com.

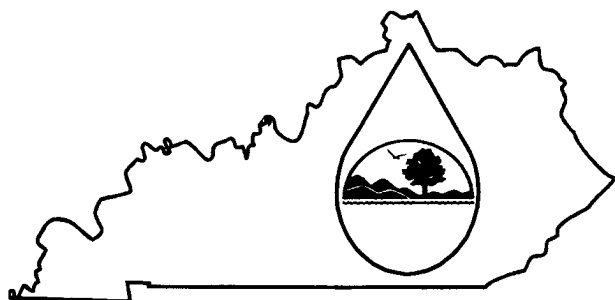
Regards,

Misty D. Hamilton
Environmental Project Manager

c: file

enclosure

KPDES FORM 1



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

This is an application to: (check one)

- ☒ Apply for a new permit.
☐ Apply for reissuance of expiring permit.
☐ Apply for a construction permit.
☐ Modify an existing permit.

Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:

Form A, Form B, Form C, Form F, or Short Form C

For additional information contact:

KPDES Branch (502) 564-3410

I. FACILITY LOCATION AND CONTACT INFORMATION		AGENCY USE							
A. Name of business, municipality, company, etc. requesting permit Sidney Coal Company, Inc.									
B. Facility Name and Location					C. Facility Owner/Mailing Address				
Facility Location Name: Bevins Branch Surface Mine					Owner Name: Sidney Coal Company, Inc.				
Facility Location Address (i.e. street, road, etc.): Near the junction of Rt. 468 and Rockhouse Fork Road					Mailing Street: P. O. Box 299				
Facility Location City, State, Zip Code: Sidney, KY 41564					Mailing City, State, Zip Code: Sidney, KY 41564				
					Telephone Number: (606) 353-7201				

II. FACILITY DESCRIPTION			
A. Provide a brief description of activities, products, etc: Surface coal mining			
B. Standard Industrial Classification (SIC) Code and Description			
Principal SIC Code & Description:		1221 - Bituminous Coal & Lignite Mining	
Other SIC Codes:			

III. FACILITY LOCATION	
A. Attach a U.S. Geological Survey 7 1/2 minute quadrangle map for the site. (See instructions)	
B. County where facility is located: Pike	City where facility is located (if applicable):
C. Body of water receiving discharge: Big Creek	
D. Facility Site Latitude (degrees, minutes, seconds): 37° 39' 47" N	Facility Site Longitude (degrees, minutes, seconds): 82° 22' 05" W
E. Method used to obtain latitude & longitude (see instructions): Topographic map coordinates	
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):	

IV. OWNER/OPERATOR INFORMATION	
A. Type of Ownership: <input type="checkbox"/> Publicly Owned <input checked="" type="checkbox"/> Privately Owned <input type="checkbox"/> State Owned <input type="checkbox"/> Both Public and Private Owned <input type="checkbox"/> Federally owned	
B. Operator Contact Information (See instructions)	
Name of Treatment Plant Operator: Sidney Coal Company, Inc.	Telephone Number: (606) 353-7201
Operator Mailing Address (Street): P. O. Box 299	
Operator Mailing Address (City, State, Zip Code): Sidney, KY 41564	
Is the operator also the owner? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the operator certified? If yes, list certification class and number below. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Certification Class:	Certification Number:

V. EXISTING ENVIRONMENTAL PERMITS		
Current NPDES Number:	Issue Date of Current Permit:	Expiration Date of Current Permit:
Number of Times Permit Reissued:	Date of Original Permit Issuance:	Sludge Disposal Permit Number:
Kentucky DOW Operational Permit #:	Kentucky DSMRE Permit Number(s): 898-0798	

C. Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source		
Solid or Special Waste		
Hazardous Waste - Registration or Permit		

VI. DISCHARGE MONITORING REPORTS (DMRs)
--

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). The information in this section serves to specifically identify the department, office or individual you designate as responsible for submitting DMR forms to the Division of Water.

A. Name of department, office or official submitting DMRs:	Randy Tackett, Agent
B. Address where DMR forms are to be sent. (Complete only if address is different from mailing address in Section I.)	
DMR Mailing Name:	
DMR Mailing Street:	
DMR Mailing City, State, Zip Code:	
DMR Official Telephone Number:	

VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. Descriptions of the base fee amounts are given in the "General Instructions."

Facility Fee Category:

Surface Mining Operation

Filing Fee Enclosed:

\$240.00

VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):

Randy L. Tackett, Agent

TELEPHONE NUMBER (area code and number):

606-353-5500

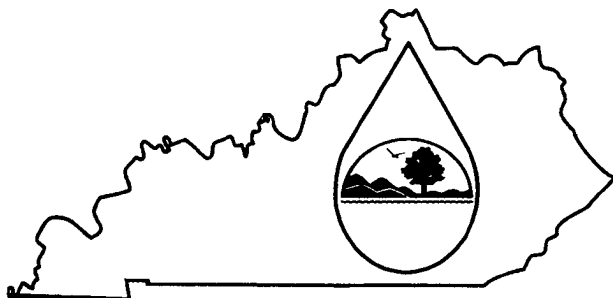
SIGNATURE

Randy L. Tackett

DATE:

8-22-07

KPDES FORM C



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Bevins Branch Surface Mine	County: Pike						
I. OUTFALL LOCATION	AGENCY USE						

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
D1	37	40	05	82	22	32	Big Creek
D2	37	40	02	82	22	34	Big Creek
D3	37	39	55	82	22	31	Big Creek
D4	37	39	53	82	22	24	Bevins Branch
D5	37	39	53	82	22	16	Bevins Branch
D5A	37	39	52	82	22	04	Bevins Branch
D5B	37	39	41	82	22	04	Bevins Branch
D6	37	39	46	82	22	12	Bevins Branch
D7	37	39	46	82	22	20	Bevins Branch
D8	37	39	46	82	22	20	Bevins Branch
Pond 1A	37	39	47	82	22	07	Bevins Branch

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
D1	Surface runoff	27.91 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D2	Surface runoff	13.32 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D3	Surface runoff	7.45 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D4	Surface runoff	18.11 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5	Surface runoff	33.60 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5A	Surface runoff	75.92 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D5B	Surface runoff	50.06 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D6	Surface runoff	14.84 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D7	Surface runoff	13.90 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
D8	Surface runoff	7.01 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
Pond 1A	Surface runoff	411.09 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

- C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐

Yes (Complete the following table.)

☒

No (Go to Section III.)

OUTFALL NUMBER	OPERATIONS CONTRIBUTING FLOW	FREQUENCY		FLOW				
		Days Per Week	Months Per Year	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	
(list)	(list)	(specify average)	(specify average)					

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ Yes (Complete Item III-B) List effluent guideline category:

☒ No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☐ Yes (Complete Item III-C)

☒ No (Go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐ Yes (Complete the following table)

☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE
NONE			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

- A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐

Yes (List all such pollutants below)

☒

No (Go to Item VI-B)

- B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐

Yes (Complete Item VI-C)

☒

No (Go to Item VII)

- C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (Identify the test(s) and describe their purposes below)

☒ No (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)

☒ No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print): Randy L. Tackett, Agent	TELEPHONE NUMBER (area code and number): 606-353-5500
SIGNATURE <i>Randy L. Tackett</i>	DATE 8-22-07

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)										OUTFALL NO.		
Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.												
1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No of Analyses
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)												
e. Ammonia (as N)												
f. Flow (in units of MGD)	VALUE		VALUE		VALUE				MGD	VALUE		
g. Temperature (winter)	VALUE		VALUE		VALUE				°C	VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE				°C	VALUE		
i. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM				STANDARD UNITS				

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		6. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Bromide (24959-67-9)														
b. Bromine Total Residual														
c. Chloride														
d. Chlorine, Total Residual														
e. Color														
f. Fecal Coliform														
g. Fluoride (16984-48-8)														
h. Hardness (as CaCO ₃)														
i. Nitrate - Nitrite (as N)														
j. Nitrogen, Total Organic (as N)														
k. Oil and Grease														
l. Phosphorous (as P), Total 7723-14-0														
m. Radioactivity														
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium Total														
(4) Radium, 226, Total														

Part B - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"		3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day		c. Long-Term Avg.		d. No. of Analyses	a.	b.	a.		b.		
			Maximum Daily Value (1)	Concentration Mass	Value (if available) (1)	Concentration Mass	Value (if available) (1)	Concentration Mass				Long-Term Avg. Value (1)	Concentration Mass		No. of Analyses	
n. Sulfate (as SO ₄) (14808-79-8)																
o. Sulfide (as S)																
p. Sulfite (as SO ₃) (14286-46-3)																
q. Surfactants																
r. Aluminum, Total (7429-90)																
s. Barium, Total (7440-39-3)																
t. Boron, Total (7440-42-8)																
u. Cobalt, Total (7440-48-4)																
v. Iron, Total (7439-89-6)																
w. Magnesium Total (7439-96-4)																
x. Molybdenum Total (7439-98-7)																
y. Manganese, Total (7439-96-6)																
z. Tin, Total (7440-31-5)																
aa. Titanium, Total (7440-32-6)																

Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the **Testing Required** column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark "X" in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark "X" in the **Believed Absent** column for each pollutant you believe to be absent. If you mark either the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
METALS, CYANIDE AND TOTAL PHENOLS															
1M. Antimony Total (7440-36-0)															
2M. Arsenic, Total (7440-38-2)															
3M. Beryllium Total (7440-41-7)															
4M. Cadmium Total (7440-43-9)															
5M. Chromium Total (7440-43-9)															
6M. Copper Total (7550-50-8)															
7M. Lead Total (7439-92-1)															
8M. Mercury Total (7439-97-6)															
9M. Nickel, Total (7440-02-0)															
10M. Selenium, Total (7782-49-2)															
11M. Silver, Total (7440-28-0)															

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day		c. Long-Term Avg.		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No. of Analyses
				Maximum Daily Value (1)	Concentration Mass	Value (if available) (1)	Concentration Mass	Value (if available) (1)	Concentration Mass				Long-Term Avg Value (1)	Concentration Mass	
METALS, CYANIDE AND TOTAL PHENOLS (Continued)															
12M. Thallium, Total (7440-28-0)															
13M. Zinc, Total (7440-66-6)															
14M. Cyanide, Total (57-12-5)															
15M. Phenols, Total															
DIOXIN															
2,3,7,8 Tetra- chlorodibenzo, p, Dioxin (1784-01-6)				DESCRIBE RESULTS:											
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)															
2V. Acrylonitrile (107-13-1)															
3V. Benzene (71-43-2)															
5V. Bromoform (75-25-2)															
6V. Carbon Tetrachloride (56-23-5)															
7V. Chloro- benzene (108-90-7)															
8V. Chlorodibro- momethane (124-48-1)															

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass							
9V. Chloroethane (74-00-3)																
10V. 2-Chloro-ethylvinyl Ether (110-75-8)																
11V. Chloroform (67-66-3)																
12V. Dichloro-bromomethane (75-71-8)																
14V. 1,1-Dichloroethane (75-34-3)																
15V. 1,2-Dichloroethane (107-06-2)																
16V. 1,1-Dichlorethylene (75-35-4)																
17V. 1,2-Di-chloropropane (78-87-5)																
18V. 1,3-Dichloropro-pylene (452-75-6)																
19V. Ethyl-benzene (100-41-4)																
20V. Methyl Bromide (74-83-9)																

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
21V. Methyl Chloride (74-87-3)																
22V. Methylene Chloride (75-00-2)																
23V. 1,1,2,2- Tetrachloro- ethane (79-34-5)																
24V. Tetrachloro- ethylene (127-18-4)																
25V. Toluene (108-88-3)																
26V. 1,2-Trans- Dichloro- ethylene (156-60-5)																
27V. 1,1,1-Tri- chloroethane (71-55-6)																
28V. 1,1,2-Tri- chloroethane (79-00-5)																
29V. Trichloro- ethylene (79-01-6)																
30V. Vinyl Chloride (75-01-4)																

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chloro-phenol (95-57-8)															
2A. 2,4-Dichlor-Orophenol (120-83-2)															
3A. 2,4-Dimeth-ylphenol (105-67-9)															
4A. 4,6-Dinitro-o-cresol (534-52-1)															
5A. 2,4-Dinitro-phenol (51-28-5)															
6A. 2-Nitro-phenol (88-75-5)															
7A. 4-Nitro-phenol (100-02-7)															
8A. P-chloro-m-cresol (59-50-7)															
9A. Pentachloro-phenol (87-88-5)															
10A. Phenol (108-05-2)															
11A. 2,4,6-Tri-chlorophenol (88-06-2)															
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acena-phthene (83-32-9)															

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
2B. Acena- phenylene (208-96-8)																
3B. Anthra- cene (120-12-7)																
4B. Benzidine (92-87-5)																
5B. Benzo(a)- anthracene (56-55-3)																
6B. Benzo(a)- pyrene (50-32-8)																
7B. 3,4-Benzo- fluoranthene (205-99-2)																
8B. Benzo(ghi) perylene (191-24-2)																
9B. Benzo(k)- fluoranthene (207-08-9)																
10B. Bis(2- chlor- oethoxy)- methane (111-91-1)																
11B. Bis (2-chlor- oisopropyl)- Ether																
12B. Bis (2-ethyl- hexyl)- phthalate (117-81-7)																

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)	
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass						
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)															
13B. 4-Bromo-phenyl Phenyl ether (101-55-3)															
14B. Butyl-benzyl phthalate (85-68-7)															
15B. 2-Chloro-naphthalene (7005-72-3)															
16B. 4-Chloro-phenyl phenyl ether (7005-72-3)															
17B. Chrysene (218-01-9)															
18B. Dibenzo-(a,h) Anthracene (53-70-3)															
19B. 1,2-Dichloro-benzene (95-50-1)															
20B. 1,3-Dichloro-Benzene (541-73-1)															
21B. 1,4-Dichloro-benzene (106-46-7)															
22B. 3,3-Dichloro-benzidene (91-94-1)															
23B. Diethyl Phthalate (84-66-2)															

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a.		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No. of Analyses	
				Maximum Daily Value (1)	Mass (2)	Value (1)	Mass (2)	Value (1)	Mass (2)				Long-Term Avg. Value (1)	Mass (2)		
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)																
24B. Dimethyl Phthalate (131-11-3)																
25B. Di-N- butyl Phthalate (84-74-2)																
26B. 2,4-Dinitro- toluene (121-14-2)																
27B. 2,6-Dinitro- toluene (606-20-2)																
28B. Di-n-octyl Phthalate (117-84-0)																
29B. 1,2- diphenyl- hydrazine (as azobenzene) (122-66-7)																
30B. Fluoranthene (208-44-0)																
31B. Fluorene (86-73-7)																
32B. Hexachloro- benzene (118-71-1)																
33B. Hexachloro- butadiene (87-68-3)																
34B. Hexachloro- cyclopenta- diene (77-47-4)																

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
35B. Hexachloroethane (67-72-1)																
36B. Indeno-(1,2,3-oc)-Pyrene (193-39-5)																
37B. Isophorone (78-59-1)																
38B. Naphthalene (91-20-3)																
39B. Nitrobenzene (98-95-3)																
40B. N-Nitroso-dimethylamine (62-75-9)																
41B. N-nitrosodi-n-propylamine (621-64-7)																
42B. N-nitrosodiphenylamine (86-30-6)																
43B. Phenanthrene (85-01-8)																
44B. Pyrene (129-00-0)																
45B. 1,2,4 Tri-chlorobenzene (120-82-1)																

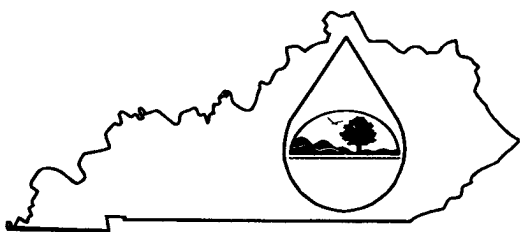
Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses	
				Concentration (1)	Mass (2)	Concentration (1)	Mass (2)	Concentration (1)	Mass (2)				Concentration (1)	Mass (2)		
GC/MS FRACTION – PESTICIDES																
1P. Aldrin (309-00-2)																
2P. α-BHC (319-84-6)																
3P. β-BHC (58-89-9)																
4P. gamma-BHC (58-89-9)																
5P. δ-BHC (319-86-8)																
6P. Chlordane (57-74-9)																
7P. 4,4'-DDT (50-29-3)																
8P. 4,4'-DDE (72-55-9)																
9P. 4,4'-DDD (72-54-8)																
10P. Dieldrin (60-57-1)																
11P. α- Endosulfan (115-29-7)																
12P. β- Endosulfan (115-29-7)																
13P. Endosulfan Sulfate (1031-07-8)																
14P. Endrin (72-20-8)																

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass						
GC/MS FRACTION – PESTICIDES															
15P. Endrin Aldenyde (7421-93-4)															
16P. Heptachlor (76-44-8)															
17P. Heptachlor Epoxide (1024-57-3)															
18P. PCB-1242 (53469-21-9)															
19P. PCB-1254 (11097-69-1)															
20P. PCB-1221 (11104-28-2)															
21P. PCB-1232 (11141-16-5)															
22P. PCB-1248 (12672-29-6)															
23P. PCB-1260 (11096-82-5)															
24P. PCB-1016 (12674-11-2)															
25P. Toxaphene (8001-35-2)															

Form HQAA



Kentucky Pollutant Discharge Elimination System (KPDES)

High Quality water Alternative Analysis

The Anti-degradation Implementation Procedures outlined in 401 KAR 5:030, Section 1(3)(b)5, allows an applicant who does not accept the effluent limitations required by sub-paragraphs 2 and 3 of 5:030, Section 1(2)(b), to demonstrate to the satisfaction of the Environmental and Public Protection Cabinet that no technologically or economically feasible alternatives exist, and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. The approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. This demonstration shall also include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

I. Permit Information

Facility Name:	Sidney Coal Company, Inc. KDMRE Permit ID. 898-0798	KPDES NO.:	
Address:	P. O. Box 299	County:	Pike
City, State, Zip Code:	Sidney, KY 41564	Receiving Water Name:	Bevins Branch of Big Creek

II. Alternatives Analysis - For each alternative below, discuss what options were considered and state why these options were not considered feasible.

1. **Discharge to other treatment facilities.** Indicate which treatment works have been considered and provide the reasons why discharge to these works is not feasible.

Alternative treatment works have been investigated. It would cost over \$ 956,000 (7,775 feet of 24" dia. HDPE pipe at \$ 67/ft. and two lifting stations at \$ 218,000 ea.) to collect and gather the discharge, from the ten sediment dugouts and one pond, in this proposal. An in-ground collection reservoir would also be required or an above ground tank.

It would also take another \$ 13.1 million to run 24" dia. min. HDPE pipe for 37 miles at \$ 67/ft, plus, over \$ 8.1 million for (37) lifting stations @ one lift station (500,000 gpd) each mile for \$ 218,000 / station, to carry the water discharge to the nearest downstream municipal water treatment plant which is the Martin County Water Treatment Facility, approximately 37 miles away. The Martin County treatment plant would then require a sedimentation basin to remove the silt before even allowing the water to enter their plant.

2. **Use of other discharge locations.** Indicate what other discharge locations have been evaluated, and the reasons why these locations are not feasible.

As an alternative to discharging into Bevins Branch and Big Creek, Sidney Coal Company examined diverting drainage and runoff into unnamed tributaries of Big Creek, the nearest adjacent drains to the project area. However, any discharge into these alternate drains would ultimately discharge into the Tug Fork of the Big Sandy River, as would any discharge into Bevins Branch. Therefore, the use of these alternate drains would not prevent degradation of water quality in the Tug Fork of the Big Sandy River. Also, gathering and collecting the discharge from the proposed ponds would cost over \$956,000, as stated above. In addition to collecting the discharge, it would cost a minimum of \$207,000 (3,100 feet of 24" diameter HDPE pipe at \$67/ft.) to pump the discharge into the nearest adjacent tributary.

II. Alternatives Analysis – continued

3. **Water reuse or recycle.** Provide information about opportunities for water reuse or recycle at this facility. If water reuse or recycle is not a feasible alternative at this facility, please indicate the reasons why.

Water does play a key part in surface mining operations as far as misting/spraying the area to help alleviate airborne coal dust. However, the amount of water required for dust suppression is minimal compared to the discharge generated. Total watershed drainage area for discharge of dugouts, is over 370.58 acres with a combined peak discharge of over 238,000 gallons per minute. Water used for dust suppression in a day might be 12,000 gallons. Dust suppression is generally only required during dry times when the flow of the surface discharge is low or non-existent. No other water is need for recycling or reuse with this operation.

A small portion of the total discharge generated will be used for hydro-seeding when grade work is completed on this project. The cost has been estimated at over \$ 956,000 dollars to collect this water and to store the large volume generated would only add to the overall cost.

4. **Alternative process or treatment options.** Indicate what process or treatment options have been evaluated and provide the reasons they were not considered feasible.

Several alternatives to treating water from the project area and discharging it to streams and rivers in the area have been evaluated. These alternatives include construction of a water treatment facility, construction of physical filter barriers, chemical treatment of drainage, and construction of wetlands.

Water Treatment Facility Construction of a small water treatment facility (500,000 gallons per day) on the project site would cost over \$ 1.6 million dollars, plus an additional cost of approximately \$50,000 for a containment reservoir. This water treatment facility would not be able to manage the large amount of water required at this site (over 238,000 gallons per minute).

Physical Filter Barriers Silt fences and straw bales would not be able to handle the large discharge flow generated nor would they meet requirements of Commonwealth of Kentucky's Surface Mine Regulations as stated in 405 KAR 16:070 .

Chemical Treatment Chemical treatment of drainage was also considered. However, the primary treatment required at this site is the removal of sediments, which is not possible using chemical treatment.

Wetland Construction Constructed wetlands have traditionally been used for biological treatment. However, the discharge generated by this operation will require sedimentation control measures, and wetlands are not effective for treating sediment. Additionally, wetlands used for water treatment would require a great deal of additional property, which is not available in this particular project area.

II. Alternatives Analysis – continued

- 5. On-site or sub-surface disposal options.** Discuss the potential for on-site or subsurface disposal. If these options are not feasible, then please indicate the reasons why.

An alternative to surface discharge from the project area is sub-surface disposal. Deep mining has been conducted in vicinity of the project area. Therefore, the sub-surface disposal of drainage from the project area would present safety concerns for any present deep mining operations, and the cost is high, due to a lifting station (\$ 218,000), 24" dia. HDPE pipe to collect discharge (\$ 520,000), and possible drilling (an injection well, depending on depth, could cost up to \$ 50,000 per well to drill), required to inject the discharge underground. Injecting this discharge underground would increase the potential of an outcrop blow-out or blow-out from an old adit and would require a UIC Permit. A suitable place to inject, within a reasonable distance of this site, has not been found.

- 6. Evaluation of other alternatives to lowering water quality.** Describe any other alternatives that were evaluated and provide the reasons why these alternatives were not feasible.

Other alternatives reviewed were:

- a) accepting a high water quality requirement, and
- b) avoiding the project.

Accepting high water quality requirements would create additional burden and cost to this project because larger ponds would have to be built. For the embankment ponds, this means more disturbances in the streams, larger volumes of water stored behind the embankments, and higher construction/removal costs (approximately \$15,000 per pond).

Avoiding this project would mean that the advantages of economic development in the surrounding small communities such as Sidney, KY, in Pike county would not be realized. At a minimum, 50 local jobs would be lost, the tax base would diminish (\$ 80,834 in severance taxes would not be collected), and local businesses would not prosper to the same extent.

III. Socio-economic Demonstration

1. State the positive and beneficial effects of this facility on the existing environment or a public health problem.

This area in Pike County has been previously mined and logged, with the discharge from those areas presently flowing untreated into area streams. Sidney Coal Company, Inc. proposes to build ten dugout ponds and one embankment pond to treat this watershed discharge. The area will also be re-graded to prevent erosion from the previous logging activities.

2. Describe this facility's effect on the employment of the area.

This mining operation would provide employment for an estimated (50) employees. These mining positions will prove to be higher paying jobs than other industries in Pike county, specifically near small communities such as Sidney, KY. The average weekly wage in the mining industry for Pike county is \$ 887.25. This is compared to the average weekly wage for all other industries in Pike County of \$ 502.50 (2003 U. S. Bureau of Labor Statistics).

3. Describe how this facility will increase or avoid the decrease of area employment.

The economy in this portion of Pike County is dependent on the Mining Industry. Therefore, this operation will provide for the continuation of higher wage permanent employment in the area work force. This also positively affects the support industries that will help to supply the material and equipment needed for mining, as well as other services such as engineering, and also the training that will be needed for employees to work in the mines. It is likely that a new mine will lead to an increase in employment, but at the very least, the mine will avoid a decrease in local employment figures.

4. Describe the industrial or commercial benefits to the community, including the creation of jobs, the raising of additional revenues, the creation of new or additional tax bases.

The surface mine facility will provide jobs in Pike County, in small communities such as Sidney, KY, and help prevent the loss of jobs when an existing area facility closes or moves to another area. Recovery of the coal, located along Bevins Branch, will produce over 738,200 tons of coal. This will generate over \$ 538,894 in severance taxes, at approximately \$ 0.73 cents/ton, of which Pike county will receive a total of over \$ 80,834 (15 percent). Additional revenue will be given to local businesses generated through increased employment to handle support services catering to the mining operation directly and to the needs of the employees on a daily basis. Local income taxes, property taxes, and sales taxes, will also add to revenue brought in by the mining facility.

These monies will be returned to the community providing funds to help establish alternative industries for additional local employment opportunities, as well as provide for public safety, environmental protection, public transportation, vocational training, local health / recreational / educational facilities, social services, industrial/economic development, workforce training, and the secondary wood industry. Property values increase when land is active. Therefore, when mining is being conducted, the land has an increased value requiring increased property taxes to be paid in to the city operating fund.

5. Describe any other economic or social benefits to the community.

This facility will not only provide mining jobs but will also provide jobs that help support the mining industry. Equipment sales and repair, mining and engineering consultants, along with fuel and transportation providers, will be needed as a result of the mine. The creation of more jobs in the surrounding communities such as Sidney, KY in Pike county, will spur community development, thus creating even more employment opportunities in the local area.

The increased payments of property taxes will benefit schools so that they have funding to purchase better equipment, improve their facilities, and increased salaries for the teachers. In addition, the increased tax payments will provide additional money for government services to better serve the local area citizens.

III. Socio-economic Demonstration – continued

	Yes	No
6. Will this project be likely to change median household income in the county?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Will this project likely change the market value of taxable property in the county?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Will this project increase or decrease revenues in the county?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Will any public buildings be affected by this system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10. How many households will be *economically* or *socially* impacted by this project?

It is estimated that (50) workers will be employed by the project. Thus, (50) households will be directly affected by the operation. These households will, in turn, affect at least 1.5 times additional households (75), of local business owners and their employees by purchasing goods and services in the area.

11. How will those households (if any) be *economically* or *socially* impacted?

(For example, through creation of jobs, educational opportunities, or other social or economic benefits)

The households of the estimated (50) facility employees will be positively impacted by the higher than average income that these mining jobs will provide. The average weekly wage for the mining industry in Pike county is \$ 887.25. The average weekly wage for all other industries in Pike county is \$ 502.50.

Additionally, many other households will be impacted by the increased business for local retailers and their employees in Pike county, engineering services, and fuel/transportation providers, particularly around small communities such as Sidney, KY. The employees of these support businesses will be positively impacted with a more secure place of employment due to the increased revenue given by the mining industry.

	Yes	No
12. Does this project replace any other methods of sewage treatment to existing facilities? If so, describe how.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>The proposed project is a surface mining operation. There are no existing sewage waste water discharges that this project could replace.</p>		

	Yes	No
13. Does this project treat any existing sources of pollution more effectively? If so, describe how.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>The discharge proposed in this application amendment will be in areas that have been mined and logged before. Presently, there are approximately 370.58 acres of uncontrolled runoff from this area. Any runoff from these drainage areas into area streams will now be treated by the proposed sediment control structures.</p>		

III. Socio-Economic Demonstration - continued		
--	--	--

	Yes	No
14. Does this project eliminate any other sources of discharge or pollutants? If so, describe how.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>The Bevins Branch watershed has been previously mined and logged. With the re-mining proposed in this project, runoff pollution will be eliminated through reclamation instead of the current uncontrolled runoff into area streams.</p>		

15. How will the increase in production levels positively affect the socio-economic condition of the area?		
<p>The increase in productivity levels is not only providing jobs for this operation at a higher than average weekly mining wage of \$ 887.25 in Pike county, versus all other industry wages of \$ 502.50 in Pike county, but will create additional revenue for the existing businesses in and around Pike county. The additional revenue of the local businesses and the severance tax dollars for Pike county generated by this project (over \$ 80,834 dollars), will provide the local government increased benefits in public safety (law enforcement, fire protection, ambulance services) and also aid in the industrial and economic development in the surrounding communities such as Sidney, KY in Pike county.</p>		

16. How will the increase in operational efficiency positively affect the socio-economic condition of the area?		
<p>The proposed method of coal extraction is the most efficient and economical method for this particular site. This method allows for maximum removal of coal reserves, increasing the amount of tax dollars that contribute to the state and local economy, and providing more jobs for people in the surrounding community. The facility will continue to provide employment to an estimated 50 workers during the life of the operation. The project will also help to provide as many as 75 additional jobs in other sectors of the economy, such as engineering, fuel, and transportation. Therefore, the proposed mining operations positively affect the local economy more than other industries.</p>		

IV Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Title:	Randy L. Tackett, Agent	Telephone No.:	(606) 353- 5500
Signature:	<i>Randy L. Tackett</i>	Date:	9-06-07

KPDES COAL GENERAL PERMIT INTERNAL REVIEW ROUTING SHEET

Permit Name: Sidney Coal Company Inc

Permit Writer: ~~Erin Wright~~

Permit Action: Review for Coverage

Description of Operation: Underground

Special Handling:

Priority: Top Priority

No.: ~~100016217~~

85262

: 898-0798

Pike

d: 5/14/2007

Date

cc:

To: ~~Erin Wright~~

☐ APPROVE

☐ DISAPPROVE

Initials: _____

Date: _____

11-27-07 ew

~~Erin Wright~~ Moscoe.
Jean ↑

* CAM - NO! Papers.
* Sidney 898-0798
\$ 240

form 1

To: Larry Sowder

☐ APPROVE

☐ DISAPPROVE

Initials: _____

Date: _____

Complete
Review

To: Ann Workman - Public Notice Coordinator

☐ APPROVE

☐ DISAPPROVE

Initials: _____

Date: _____

Comments:

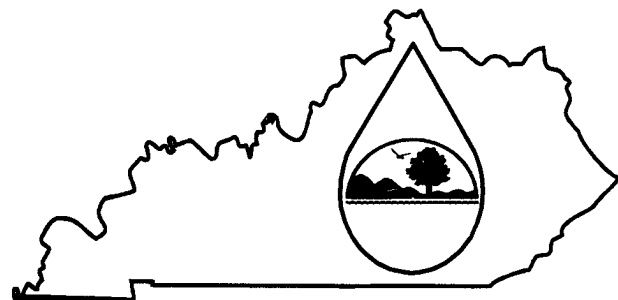
Estimated Public Notice Date: _____

Pair w/ APP

Final Destination: Division of Water Files (NONDISCLOSABLE)

KPDES FORM C

AI: 85262



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Fraley Branch Surface Mine	County: Pike						
I. OUTFALL LOCATION	AGENCY						
	USE						

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
See attachment							

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
See attachment				

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐

Yes (Complete the following table.)

☒

No (Go to Section III.)

OUTFALL NUMBER (list)	OPERATIONS CONTRIBUTING FLOW (list)	FREQUENCY		FLOW				
		Days Per Week (specify average)	Months Per Year (specify average)	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐

Yes (Complete Item III-B) List effluent guideline category:

☒

No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☐

Yes (Complete Item III-C)

☒

No (Go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐

Yes (Complete the following table)

☒

No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

- D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE
None			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

- A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐

Yes (List all such pollutants below)

☒

No (Go to Item VI-B)

- B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐

Yes (Complete Item VI-C)

☒

No (Go to Item VII)

- C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (Identify the test(s) and describe their purposes below)

☒ No (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)

☐ No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)
Appalachian States Analytical, LLC	P.O. Box 520 Shelbiana, KY 41562	(606) 437-5616	Total Suspended Solids Antimony, Total Chromium, Total Nickel, Total Zinc, Total Sulfate pH Arsenic, , Total Copper, Total Selenium, Total Cyanide, Total Iron, Total Beryllium, Total Lead, Total Silver, Total Phenols, Total Hardness Manganese, Total Cadmium, Total Mercury, Total Thallium, Total

ATTACHMENT - SECTION I
OUTFALL LOCATIONS

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
005	37	40	37	82	22	44	Big Creek
006	37	40	10	82	22	37	Big Creek
007	37	40	23	82	22	17	Fraley Branch
008	37	40	15	82	22	18	Fraley Branch
009	37	40	17	82	22	25	Fraley Branch

ATTACHMENT - SECTION II
FLows, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

Outfall No. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operations (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
005	Surface Runoff	8.75 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
006	Surface Runoff	21.73 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
007	Surface Runoff	47.18 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
008	Surface Runoff	10.84 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A
009	Surface Runoff	12.77 cfs (peak)	Sedimentation	1-U
			Discharge to surface water	4-A

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)										OUTFALL NO.	
Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.											
1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	b. No of Analyses	
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass					(1) Concentration
a. Biochemical Oxygen Demand (BOD)											
b. Chemical Oxygen Demand (COD)											
c. Total Organic Carbon (TOC)											
d. Total Suspended Solids (TSS)	22						1	mg/l			
e. Ammonia (as N)											
f. Flow (in units of MGD)	VALUE No Flow		VALUE		VALUE		1	MGD		VALUE	
g. Temperature (winter)	VALUE		VALUE		VALUE			°c		VALUE	
h. Temperature (summer)	VALUE		VALUE		VALUE			°c		VALUE	
i. pH	MINIMUM 7.02	MAXIMUM 7.02	MINIMUM	MAXIMUM				STANDARD UNITS			

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		6. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Value	(2) Mass	
a. Bromide (24959-67-9)		X												
b. Bromine Total Residual		X												
c. Chloride		X												
d. Chlorine, Total Residual		X												
e. Color		X												
f. Fecal Coliform		X												
g. Fluoride (16984-48-8)		X												
h. Hardness (as CaCO ₃)	X		414.77						1	mg/l				
i. Nitrate - Nitrite (as N)		X												
j. Nitrogen, Total Organic (as N)		X												
k. Oil and Grease		X												
l. Phosphorous (as P), Total 7723-14-0		X												
m. Radioactivity														
(1) Alpha, Total		X												
(2) Beta, Total		X												
(3) Radium Total		X												
(4) Radium, 226, Total		X												

Part B - Continued														
1. POLLUTANT And CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
n. Sulfate (as SO ₄) (14808-79-8)	X		399						1	mg/l				
o. Sulfide (as S)		X												
p. Sulfite (as SO ₃) (14286-46-3)		X												
q. Surfactants		X												
r. Aluminum, Total (7429-90)		X												
s. Barium, Total (7440-39-3)		X												
t. Boron, Total (7440-42-8)		X												
u. Cobalt, Total (7440-48-4)		X												
v. Iron, Total (7439-89-6)	X		0.09						1	mg/l				
w. Magnesium Total (7439-96-4)		X												
x. Molybdenum Total (7439-98-7)		X												
y. Manganese, Total (7439-96-6)	X		<0.01						1	mg/l				
z. Tin, Total (7440-31-5)		X												
aa. Titanium, Total (7440-32-6)		X												

Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark “X” in the Testing Required column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark “X” in the Believed Present column for each pollutant you know or have reason to believe is present. Mark “X” in the Believed Absent column for each pollutant you believe to be absent. If you mark either the Testing Required or Believed Present columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT						4. UNITS		5. INTAKE (optional)				
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
1M. Antimony Total (7440-36-0)	X			<0.002						1	mg/l					
2M. Arsenic, Total (7440-38-2)	X			<0.001						1	mg/l					
3M. Beryllium Total (7440-41-7)	X			<0.005						1	mg/l					
4M. Cadmium Total (7440-43-9)	X			<0.005						1	mg/l					
5M. Chromium Total (7440-43-9)	X			<0.02						1	mg/l					
6M. Copper Total (7550-50-8)	X			<0.01						1	mg/l					
7M. Lead Total (7439-92-1)	X			<0.05						1	mg/l					
8M. Mercury Total (7439-97-6)	X			<0.0002						1	mg/l					
9M. Nickel, Total (7440-02-0)	X			0.009						1	mg/l					
10M. Selenium, Total (7782-49-2)	X			0.009						1	mg/l					
11M. Silver, Total (7440-28-0)	X			<0.01						1	mg/l					

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				Maximum Concentration (1)	Mass (2)	Value (1)	Mass (2)	Value (1)	Mass (2)				Concentration (1)	Mass (2)	
METALS, CYANIDE AND TOTAL PHENOLS (Continued)															
12M. Thallium, Total (7440-28-0)	X			0.1						1	mg/l				
13M. Zinc, Total (7440-66-6)	X			<0.005						1	mg/l				
14M. Cyanide, Total (57-12-5)	X			<0.01						1	mg/l				
15M. Phenols, Total	X			<0.04						1	mg/l				
DIOXIN															
2,3,7,8 Tetra- chlorodibenzo, P, Dioxin (1784-01-6)			X	DESCRIBE RESULTS:											
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)			X												
2V. Acrylonitrile (107-13-1)			X												
3V. Benzene (71-43-2)			X												
5V. Bromoform (75-25-2)			X												
6V. Carbon Tetrachloride (56-23-5)			X												
7V. Chloro- benzene (108-90-7)			X												
8V. Chlorodibro- momethane (124-48-1)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
9V. Chloroethane (74-00-3)			X												
10V. 2-Chloro- ethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X												
12V. Dichloro- bromomethane (75-71-8)			X												
14V. 1,1- Dichloroethane (75-34-3)			X												
15V. 1,2- Dichloroethane (107-06-2)			X												
16V. 1,1- Dichloroethylene (75-35-4)			X												
17V. 1,2-Di- chloropropane (78-87-5)			X												
18V. 1,3- Dichloropro- pylene (452-75-6)			X												
19V. Ethyl- benzene (100-41-4)			X												
20V. Methyl Bromide (74-83-9)			X												

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
21V. Methyl Chloride (74-87-3)			X													
22V. Methylene Chloride (75-00-2)			X													
23V. 1,1,2,2- Tetrachloro- ethane (79-34-5)			X													
24V. Tetrachloro- ethylene (127-18-4)			X													
25V. Toluene (108-88-3)			X													
26V. 1,2-Trans- Dichloro- ethylene (156-60-5)			X													
27V. 1,1,1-Tri- chloroethane (71-55-6)			X													
28V. 1,1,2-Tri- chloroethane (79-00-5)			X													
29V. Trichloro- ethylene (79-01-6)			X													
30V. Vinyl Chloride (75-01-4)			X													

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
GC/MS FRACTION – ACID COMPOUNDS																
1A. 2-Chloro-phenol (95-57-8)			X													
2A. 2,4-Dichlor-Orophenol (120-83-2)			X													
3A. 2,4-Dimeth-ylphenol (105-67-9)			X													
4A. 4,6-Dinitro-o-cresol (534-52-1)			X													
5A. 2,4-Dinitro-phenol (51-28-5)			X													
6A. 2-Nitro-phenol (88-75-5)			X													
7A. 4-Nitro-phenol (100-02-7)			X													
8A. P-chloro-m-cresol (59-50-7)			X													
9A. Pentachloro-phenol (87-88-5)			X													
10A. Phenol (108-05-2)			X													
11A. 2,4,6-Tri-chlorophenol (88-06-2)			X													
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS																
1B. Acena-phthene (83-32-9)			X													

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
2B. Acena- phylyene (208-96-8)			X												
3B. Anthra- cene (120-12-7)			X												
4B. Benzidine (92-87-5)			X												
5B. Benzo(a)- anthracene (56-55-3)			X												
6B. Benzo(a)- pyrene (50-32-8)			X												
7B. 3,4-Benzo- fluoranthene (205-99-2)			X												
8B. Benzo(ghi) perylene (191-24-2)			X												
9B. Benzo(k)- fluoranthene (207-08-9)			X												
10B. Bis(2- chlor- oethoxy)- methane (111-91-1)			X												
11B. Bis (2-chlor- oisopropyl)- Ether			X												
12B. Bis (2-ethyl- hexyl)- phthalate (117-81-7)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
G/C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
13B. 4-Bromo-phenyl Phenyl ether (101-55-3)			X													
14B. Butyl-benzyl phthalate (85-68-7)			X													
15B. 2-Chloro-naphthalene (7005-72-3)			X													
16B. 4-Chloro-phenyl phenyl ether (7005-72-3)			X													
17B. Chrysene (218-01-9)			X													
18B. Dibenzo-(a,h) Anthracene (53-70-3)			X													
19B. 1,2-Dichloro-benzene (95-50-1)			X													
20B. 1,3-Dichloro-Benzene (541-73-1)			X													
21B. 1,4-Dichloro-benzene (106-46-7)			X													
22B. 3,3-Dichloro-benzidine (91-94-1)			X													
23B. Diethyl Phthalate (84-66-2)			X													

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2 MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)	
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
24B. Dimethyl Phthalate (131-11-3)			X												
25B. Di-N- butyl Phthalate (84-74-2)			X												
26B. 2,4-Dinitro- toluene (121-14-2)			X												
27B. 2,6-Dinitro- toluene (606-20-2)			X												
28B. Di-n-octyl Phthalate (117-84-0)			X												
29B. 1,2- diphenyl- hydrazine (as azonbenzene) (122-66-7)			X												
30B. Fluoranthene (208-44-0)			X												
31B. Fluorene (86-73-7)			X												
32B. Hexachloro- benzene (118-71-1)			X												
33B. Hexachloro- butadiene (87-68-3)			X												
34B. Hexachloro- cyclopenta- diene (77-47-4)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)																
35B. Hexachloroethane (67-72-1)			X													
36B. Indeno-(1,2,3-oc)-Pyrene (193-39-5)			X													
37B. Isophorone (78-59-1)			X													
38B. Naphthalene (91-20-3)			X													
39B. Nitrobenzene (98-95-3)			X													
40B. N-Nitrosodimethylamine (62-75-9)			X													
41B. N-nitrosodi-n-propylamine (621-64-7)			X													
42B. N-nitrosodiphenylamine (86-30-6)			X													
43B. Phenanthrene (85-01-8)			X													
44B. Pyrene (129-00-0)			X													
45B. 1,2,4 Tri-chlorobenzene (120-82-1)			X													

Part C - Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS FRACTION – PESTICIDES															
1P. Aldrin (309-00-2)			X												
2P. α-BHC (319-84-6)			X												
3P. β-BHC (58-89-9)			X												
4P. gamma-BHC (58-89-9)			X												
5P. δ-BHC (319-86-8)			X												
6P. Chlordane (57-74-9)			X												
7P. 4,4'-DDT (50-29-3)			X												
8P. 4,4'-DDE (72-55-9)			X												
9P. 4,4'-DDD (72-54-8)			X												
10P. Dieldrin (60-57-1)			X												
11P. α- Endosulfan (115-29-7)			X												
12P. β- Endosulfan (115-29-7)			X												
13P. Endosulfan Sulfate (1031-07-8)			X												
14P. Endrin (72-20-8)			X												

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses	
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass		
GC/MS FRACTION – PESTICIDES																
15P. Endrin Aldehyde (7421-93-4)			X													
16P. Heptachlor (76-44-8)			X													
17P. Heptaclor Epoxide (1024-57-3)			X													
18P. PCB-1242 (53469-21-9)			X													
19P. PCB-1254 (11097-69-1)			X													
20P. PCB-1221 (11104-28-2)			X													
21P. PCB-1232 (11141-16-5)			X													
22P. PCB-1248 (12672-29-6)			X													
23P. PCB-1260 (11096-82-5)			X													
24P. PCB-1016 (12674-11-2)			X													
25P. Toxaphene (8001-35-2)			X													



SUMMIT ENGINEERING, INC.

October 30, 2007

Erin Wright
Inventory & Data Management Section
KPDES Branch
Division of Water
14 Reilly Road
Frankfort, Kentucky 40601

RE: Sidney Coal Company, Inc.
KDMRE Permit No. 898-0798
Bevins Branch Surface Mine

Dear Erin:

Please find enclosed a copy of a revised Form C for the above-referenced surface mine to be located in Pike County.

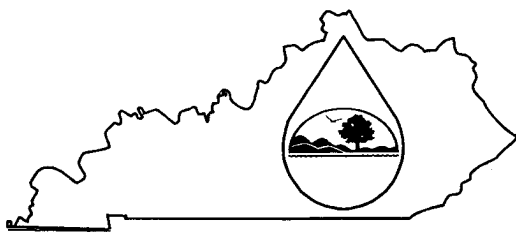
If you have any questions, or require additional information, please call me at (606) 432-1447 ext. 309 or e-mail mhamilton@summit-engr.com.

Regards,

Misty D. Hamilton
Environmental Project Manager

c: file

enclosure



Kentucky Pollutant Discharge Elimination System (KPDES)

High Quality water Alternative Analysis

The Anti-degradation Implementation Procedures outlined in 401 KAR 5:030, Section 1(3)(b)5, allows an applicant who does not accept the effluent limitations required by sub-paragraphs 2 and 3 of 5:030, Section 1(2)(b), to demonstrate to the satisfaction of the Environmental and Public Protection Cabinet that no technologically or economically feasible alternatives exist, and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. The approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. This demonstration shall also include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

I. Permit Information

Facility Name:	Sidney Coal Company, Inc. KDMRE Permit ID. 898-0798	KPDES NO.:	
Address:	P. O. Box 299	County:	Pike
City, State, Zip Code:	Sidney, KY 41564	Receiving Water Name:	Bevins Branch of Big Creek

II. Alternatives Analysis - For each alternative below, discuss what options were considered and state why these options were not considered feasible.

- 1. Discharge to other treatment facilities.** Indicate which treatment works have been considered and provide the reasons why discharge to these works is not feasible.

Alternative treatment works have been investigated. It would cost over \$ 956,000 (7,775 feet of 24" dia. HDPE pipe at \$ 67/ft. and two lifting stations at \$ 218,000 ea.) to collect and gather the discharge, from the ten sediment dugouts and one pond, in this proposal. An in-ground collection reservoir would also be required or an above ground tank.

It would also take another \$ 13.1 million to run 24" dia. min. HDPE pipe for 37 miles at \$ 67/ft, plus, over \$ 8.1 million for (37) lifting stations @ one lift station (500,000 gpd) each mile for \$ 218,000 / station, to carry the water discharge to the nearest downstream municipal water treatment plant which is the Martin County Water Treatment Facility, approximately 37 miles away. The Martin County treatment plant would then require a sedimentation basin to remove the silt before even allowing the water to enter their plant. These high basic costs alone prohibit this possible alternative.

- 2. Use of other discharge locations.** Indicate what other discharge locations have been evaluated, and the reasons why these locations are not feasible.

As an alternative to discharging in Bevins Branch and Big Creek, Sidney Coal Company examined diverting drainage and runoff into unnamed tributaries of Big Creek. These are the nearest adjacent drains to the project area. However, any discharge into these alternative drains would still, ultimately, discharge into Big Creek. These alternative streams would not only have their normal flows, but would also receive the diverted flow from Bevins Branch and Big Creek. Also, gathering and collecting the discharge from the ten proposed dugouts and one embankment pond is already cost prohibitive as it would cost over \$ 956,000 dollars to do this work, as stated above.

↳ Is this how much it would cost

to run pipe to the
alternative discharge
locations?

II. Alternatives Analysis – continued

3. **Water reuse or recycle.** Provide information about opportunities for water reuse or recycle at this facility. If water reuse or recycle is not a feasible alternative at this facility, please indicate the reasons why.

Water does play a key part in surface mining operations as far as misting/spraying the area to help alleviate airborne coal dust. However, the amount of water required for dust suppression is minimal compared to the discharge generated. Total watershed drainage area for discharge of dugouts, is over (370.58) acres with a combined peak discharge of over 238,000 gallons per minute. Water used for dust suppression in a day might be 12,000 gallons. Dust suppression is generally only required during dry times when the flow of the surface discharge is low or non-existent. No other water is need for recycling or reuse with this operation.

A small portion of the total discharge generated will be used for hydro-seeding when grade work is completed on this project but the cost to collect the total volume of the discharge prohibits the use of all the water generated. The cost has been estimated at over \$ 956,000 dollars to collect this water and to store the large volume generated would only add to the overall cost.

4. **Alternative process or treatment options.** Indicate what process or treatment options have been evaluated and provide the reasons they were not considered feasible.

Alternatives reviewed included building an on-site water treatment plant, physical filter barriers, chemical treatment of the discharge, and wetlands construction.

Construction of a small water treatment facility (500,000 gallons per day) on the project site would be over \$ 1.6 million dollars plus the cost of a containment reservoir. The short life of the proposed operation (only five years), and the large amount of water to be treated (238,000 gallons per minute), prohibits the building of an on-site treatment plant.

The construction of silt fences and straw bales will not be able to handle the large discharge flow generated nor will they meet requirements of Commonwealth of Kentucky's Surface Mine Regulations as stated in 405 KAR 16:070 .

Chemical treatment of drainage was also considered, and with chemical treatment, the ponds and dugouts are still needed to collect the sludge created by this process. Thus, chemical treatment only adds cost to the operation. — How much \$?

Constructed wetlands could be used to treat water discharged from the project area but is not a feasible alternative. The primary need for treatment of the water is sedimentation, and wetlands are not effective for treating sediment. Additionally, wetlands used for water treatment would require a great deal of property, which is not available in this particular project area. Thus, use of wetlands for water treatment is not a feasible alternative. — How much \$?

II. Alternatives Analysis – continued

5. **On-site or sub-surface disposal options.** Discuss the potential for on-site or subsurface disposal. If these options are not feasible, then please indicate the reasons why.

An alternative to surface discharge from the project area is sub-surface disposal. Deep mining has been conducted in vicinity of the project area. Therefore, the sub-surface disposal of drainage from the project area would present safety concerns for any present deep mining operations, and this option is cost prohibitive due to a lifting station (\$ 218,000), 24" dia. HDPE pipe to collect discharge (\$ 520,000), and possible drilling (an injection well, depending on depth, could cost up to \$ 50,000 per well to drill), required to inject the discharge underground. Injecting this discharge underground would increase the potential of an outcrop blow-out or blow-out from an old adit and would require a UIC Permit. A suitable place to inject, within a reasonable distance of this site, has not been found.

6. **Evaluation of other alternatives to lowering water quality.** Describe any other alternatives that were evaluated and provide the reasons why these alternatives were not feasible.

Other alternatives reviewed were:

- a) accepting a high water quality requirement, and
- b) avoiding the project.

Accepting high water quality requirements would create additional burden and cost to this project, and in order to do this, larger ponds would have to be built. For the embankment ponds, this means more disturbances in the streams, larger volumes of water stored behind the embankments, and higher construction/removal costs (approximately \$ 15,000 dollars per pond).

Avoiding this project is also not a viable option since the advantages of economic development in the surrounding small communities such as Sidney, KY, in Pike county would not be realized. Local jobs would be lost, the tax base would diminish, and local businesses would not prosper to the same extent.

~~Hence, alternatives to lowering water quality were eliminated.~~

How much \$?

III. Socio-economic Demonstration

1. State the positive and beneficial effects of this facility on the existing environment or a public health problem.

This area has been previously mined and logged with the discharge from those areas presently flowing untreated into area streams. Sidney Coal Company, Inc. proposes to build ten dugout ponds and one embankment pond to treat this watershed discharge. The area will also be re-graded to prevent erosion from the previous logging activities.

What county?

2. Describe this facility's effect on the employment of the area.

This mining operation would provide employment for an estimated (50) employees. These mining positions will prove to be higher paying jobs than other industries in Pike county, specifically near small communities such as Sidney, KY. The average weekly wage in the mining industry for Pike county is \$ 887.25. This is compared to the average weekly wage for all other industries in Pike County of \$ 502.50 (2003 U. S. Bureau of Labor Statistics).

3. Describe how this facility will increase or avoid the decrease of area employment.

The economy, in this portion of Pike County, is dependent on the Mining Industry. Therefore, this operation will provide for the continuation of higher wage permanent employment in the area work force. This also positively affects the support industries that will help to supply the material and equipment needed for mining, as well as other services such as engineering, and also the training that will be needed for employees to work in the mines.

It is likely that a new mine will lead to an increase in employment, but at the very least, the mine will avoid a decrease in local employment figures.

4. Describe the industrial or commercial benefits to the community, including the creation of jobs, the raising of additional revenues, the creation of new or additional tax bases.

The surface mine facility will provide new jobs in Pike County, in small communities such as Sidney, KY, and help prevent the loss of jobs when an existing area facility closes or moves to another area. Recovery of the coal, located along Bevins Branch, will produce over 738,200 tons of coal. This will generate over \$ 538,894 in severance taxes, at approximately \$ 0.73 cents/ton, of which Pike county will receive a total of over \$ 80,834 (15 percent). Additional revenue will be given to local businesses generated through increased employment to handle support services catering to the mining operation directly and to the needs of the employees on a daily basis. Local income taxes, property taxes, and sales taxes, will also add to revenue brought in by the mining facility.

These monies will be returned to the community providing funds to help establish alternative industries for additional local employment opportunities, as well as provide for public safety, environmental protection, public transportation, vocational training, local health / recreational / educational facilities, social services, industrial/economic development, workforce training, and the secondary wood industry. Property values increase when land is active. Therefore, when mining is being conducted, the land has an increased value requiring increased property taxes to be paid in to the city operating fund.

5. Describe any other economic or social benefits to the community.

This facility will not only provide mining jobs but will also provide jobs that help support the mining industry. Equipment sales and repair, mining and engineering consultants, along with fuel and transportation providers, will be needed as a result of the mine. The creation of more jobs in the surrounding communities such as Sidney, KY in Pike county, will spur community development, thus creating even more employment opportunities in the local area.

The increased payments of property taxes will benefit schools so that they have funding to purchase better equipment, improve their facilities, and increased salaries for the teachers. In addition, the increased tax payments will provide additional money for government services to better serve the local area citizens.

III. Socio-economic Demonstration – continued

	Yes	No
6. Will this project be likely to change median household income in the county?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Will this project likely change the market value of taxable property in the county?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Will this project increase or decrease revenues in the county?	<input type="checkbox"/>	<input type="checkbox"/>
9. Will any public buildings be affected by this system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10. How many households will be *economically* or *socially* impacted by this project?

It is estimated that (50) workers will be employed by the project. Thus, (50) households will be directly affected by the operation. These households will, in turn, affect at least 1.5 times additional households (75), of local business owners and their employees by purchasing goods and services in the area.

11. How will those households (if any) be *economically* or *socially* impacted?
(For example, through creation of jobs, educational opportunities, or other social or economic benefits)

The households of the estimated (50) facility employees will be positively impacted by the higher than average income that these mining jobs will provide. The average weekly wage for the mining industry in Pike county is \$ 887.25. The average weekly wage for all other industries in Pike county is \$ 502.50.

Additionally, many other households will be impacted by the increased business for local retailers and their employees in Pike county, engineering services, and fuel/transportation providers, particularly around small communities such as Sidney, KY. The employees of these support businesses will be positively impacted with a more secure place of employment due to the increased revenue given by the mining industry.

	Yes	No
12. Does this project replace any other methods of sewage treatment to existing facilities? If so, describe how.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>The proposed project is a surface mining operation. There are no existing sewage waste water discharges that this project could replace.</p>		
<div style="display: flex; justify-content: flex-end;"> <div style="text-align: center; margin-right: 10px;">Yes</div> <div style="text-align: center;">No</div> </div>		
13. Does this project treat any existing sources of pollution more effectively? If so, describe how.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>The discharge proposed in this application is in areas that have not been mined before. Presently, the surface discharge is uncontrolled runoff. Any discharge from these drainage areas into area streams will now be treated for sediment control.</p>		

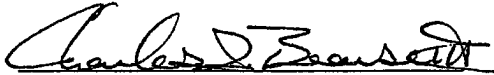
III. Socio-Economic Demonstration - continued			
	Yes	No	
14. Does this project eliminate any other sources of discharge or pollutants? If so, describe how.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<p>The Bevins Branch watershed area has been previously mined and logged. With the mining proposed for this project and the areas that have been logged, this watershed area will now be provided with sediment control structures instead of the current uncontrolled runoff into area streams.</p> <p style="margin-left: 100px;"><i>→ What pollution will you be "eliminating"?</i></p>			
15. How will the increase in production levels positively affect the socio-economic condition of the area?			
<p>The increase in productivity levels is not only providing jobs for this operation at a higher than average weekly mining wage of \$ 887.25 in Pike county, versus all other industry wages of \$ 502.50 in Pike county, but will create additional revenue for the existing businesses in and around Pike county. The additional revenue of the local businesses and the severance tax dollars for Pike county generated by this project (over \$ 80,834 dollars), will provide the local government increased benefits in public safety (law enforcement, fire protection, ambulance services) and also aid in the industrial and economic development in the surrounding communities such as Sidney, KY in Pike county.</p>			
16. How will the increase in operational efficiency positively affect the socio-economic condition of the area?			
<p>The facility (a surface mine), will provide employment to an estimated (50) workers during the life of the operation. Also, the project will help to provide additional jobs in other sectors of the economy such as engineering, fuel, and transportation. Thus, mining operations positively affect the local economy more so than other industries.</p> <p style="margin-left: 100px;"><i>Better Operation = Better Production = More Jobs</i></p>			
<p>IV. Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine & imprisonment for knowing violations.</p>			
Printed Name and Title:	Randy L. Tackett, Agent	Telephone No. w/Area Code	606-353-5500
Signature:	<i>Randy L. Tackett</i>	Date:	3-12-07

Sidney Coal Company, Inc. 898-0798 KPDES Form HQAA Bevins Branch March 2007

APPOINTMENT OF AUTHORIZED AGENT

KNOW ALL MEN BY THESE PRESENTS, that Sidney Coal Company, Inc., a corporation duly organized and existing under the laws of the Commonwealth of Kentucky, has made, constituted and appointed, and by these presents doth hereby make, constitute and appoints Randy L. Tackett of Pike County, in the commonwealth of Kentucky, to be its true and lawful Authorized Agent, who may act for it and in its name, and as and for its corporate act and deed, to sign for and on behalf of Sidney Coal Company, Inc. all permit applications and other related documents pertaining to all coal mining operations and related activities pertaining to Sidney Coal Company, Inc. including those regulated by state and/or federal law in connection with Sidney Coal Company, Inc. lands and operations situated in the Commonwealth of Kentucky. This Authority shall become effective with the execution of this document.

Sidney Coal Company, Inc.


BY: Charles I. Bearse
Its, President

STATE OF Kentucky

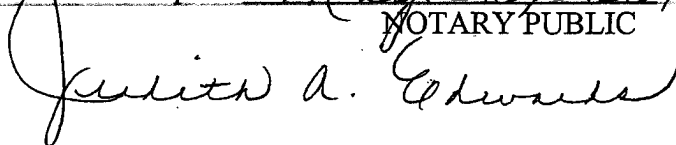
COUNTY OF PIKE, to wit:

I, Judith A. Edwards, a Notary Public in and for the state and county aforesaid, do hereby certify that Charles I. Bearse, as president of Sidney Coal Company, Inc., whose name as such is signed to the foregoing write this 1st day of November 2005, has signed before me, in my said County, acknowledged and said writing.

Given under my hand this 1st day of November, 2005

My commission expires May 20, 2007

NOTARY PUBLIC



THIS IS A TRUE AND EXACT COPY
OF THE ORIGINAL DOCUMENT.

NOTARY PUBLIC Randall C. Stephens
MY COMMISSION EXPIRES 4/25/2010

